

**SUBSISTENCE HARVESTS IN  
SIX KODIAK ISLAND  
BOROUGH COMMUNITIES, 1986**

by

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## ABSTRACT

This report summarizes the results of a household survey conducted as part of a cooperative project between the Division of Subsistence, Alaska Department of Fish and Game, and the Kodiak Area Native Association (KANA) in 1987. In total, 211 household interviews took place in the Kodiak Island Borough communities of Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions. The interviews were conducted by local community residents who had been hired by KANA and trained by the Division of Subsistence. The subsistence harvest and use data contained in the report pertain to the 1986 calendar year.

The harvest survey results, reported in a series of tables and figures for each community, include estimates of harvest quantities, levels of participation in harvest activities, the average range of resource uses per household, and salmon harvests by gear type. The research found that virtually every sampled household used subsistence resources in 1986 and was involved in subsistence harvest activities. As measured in pounds usable weight, salmon contributed the most to the subsistence harvest in all six communities, but substantial quantities of other fish, land mammals, marine invertebrates, birds, wild plants, and, in some communities, marine mammals, were taken as well. Resource harvests in all six villages were diverse. Estimated per capita harvest quantities were, for the most part, consistent with findings for other small Alaska Native communities of Southcentral and southwest Alaska.

The research also documented notably lower subsistence harvests in three communities (Akhiok, Karluk, and Larsen Bay) in 1986 than had been estimated for **1982/3** by another cooperative project between KANA and the division. Reasons for these apparent declines are uncertain. They may be the product of sampling procedures or represent annual fluctuations in subsistence activities. In contrast, **harvests** in the other three communities (Old Harbor, Ouzinkie, and Port Lions) were very similar in both study years. Additional research will be necessary to demonstrate long-term trends in subsistence patterns in these six communities.



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## PREFACE

This **report** contains the results of a household harvest survey jointly conducted by the Division of Subsistence of the Alaska Department of Fish and Game and the Kodiak Area Native Association in 1987. A review draft of the report was completed in late 1989. The present version was largely completed in 1999. Final completion and printing of the report have been delayed due to other staff assignments, particularly subsequent household surveys undertaken in Kodiak Island Borough communities following the **Exxon** Valdez oil spill of March 1989. The data in this report, which pertain to 1986, have previously been published in the Division of Subsistence Community Profile Database (CPDB) and have also appeared in several conference papers and other reports. The primary purpose of preparing this report is to describe the research methods used to collect the 1986 data and to briefly compare the findings with those of a similar study pertaining to **1982/83**. The reader should consult other Division of Subsistence technical papers and the CPDB for harvest data for 1989 and subsequent years.

## INTRODUCTION

### Background

In 1983, the Kodiak Area Native Association (KANA) and the Division of Subsistence of the Alaska Department of Fish and Game collaborated in a research project which collected information on subsistence harvests and uses in eight Kodiak Island Borough communities for a 12-month study period from June 1, 1982 through May 31, 1983 (KANA 1983; ADF&G 1985a, 1985b; Schroeder et al 1987; Scott et al. 1992. 1993). That research produced information on harvest quantities, levels of household participation in harvest activities and sharing activities, and maps of resource harvest areas.

In October 1986, KANA contacted the division about a household survey which it planned to conduct in the six borough villages. These communities are Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions (Fig. 1). KANA suggested that this survey was an opportunity to update the 1982/83 data and requested the division's assistance in designing the subsistence use and harvest questions, training interviewers, and analyzing the survey results. In November 1986, division personnel met with KANA's Overall Economic Development Planning (OEDP) committee. A review of the draft questionnaire was completed and the committee's endorsement of the project was obtained. The division and KANA then entered into a memorandum of understanding which specified each organization's responsibilities in the cooperative study.

Division personnel traveled to Kodiak in January 1987, where training sessions were held with interviewers from each community hired by KANA. Interviewing began in February 1987, with data collected on harvest activities for the previous calendar year (1986): By August 1987 the division had received the completed survey forms, at which time data coding and computer entry occurred. During the division's review of the surveys, a number of questions arose which required consultation with KANA to resolve. Unfortunately, because of personnel changes at KANA, no one was available to address these problems and, consequently, data analysis was delayed.

In 1989, the division reviewed the data again, made a series of data management decisions, and decided to publish the results of the 1987 survey in the Community Profile Database (Scott et al. 1992) and

in a technical paper because of the current interest in Kodiak subsistence harvest **data**.<sup>1</sup> A draft of this report has been reviewed by KANA and the revised final report is being released with that organization's endorsement (Appendix A).

As discussed in more detail in the methods section, the 1986 survey data must be understood with several important limitations in mind. Sample sizes were low in some cases and households were not randomly selected. This raises the question of how representative the survey data are for the communities overall. Also, as noted above, division staff had to resolve ambiguities with some survey forms without consultation with the **interviewers**. This may have led **to** an underestimation of harvests in some villages (see below). Because of these questions, this report includes revised summaries of the **1982/83** data for comparisons (Appendix B). The 1988 study was conducted with a larger sample of households in most of the villages and may be more representative of community harvest patterns. In combination, we **believe** these two sets of data provide a good overview of subsistence harvest patterns in the six communities. We caution however, that these two years of data from samples of village households can only be understood as a beginning of documentation of subsistence harvests in the Kodiak island Borough. Additional study is necessary to understand such factors as between-year variability in harvest levels or long-term trends in these harvest activities.

### Objectives

Objectives of the research related to fish and wildlife harvests included the following for the communities of Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions:

1. Estimates of the percentage of community households which used, attempted to harvest, harvested, received, or gave away each wild fish, game, or plant resource in 1986;
2. Estimates of household harvest quantities for each resource for 1986 in numbers of fish or animals, gallons, or other appropriate measures;

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<sup>1</sup> As the final version of this report was being prepared in December **1990**, the division was completing analysis of a third harvest survey conducted in the six borough villages for the 1989 calendar year. Subsequent reports will include comparisons of the data from 1983, 1986, and 1989.

3. Estimates of salmon and other fish and marine invertebrate harvests by gear type, including numbers of these resources removed from commercial catches for home use; and
4. Household demographic characteristics, such as size and ethnicity.

## METHODS

### Data Gathering Instrument

A questionnaire administered in person, usually in the homes of community residents, was the primary data gathering instrument. The resource use and harvest sections of the questionnaire followed the format of other division survey forms used in other Southcentral and southwest Alaska communities. Sections of the form pertain to each major resource category (e.g. salmon, game, marine mammals), with separate sections on commercial fishing activities and household demography. The instrument was pretested among the interviewers, all of whom were village residents employed by KANA, in January 1987, and then revised before the village fieldwork began.

### Sampling

The goal of the research was to conduct an interview with members of each household in all six villages. Interviewers were instructed to compile a list of all year-round households in the communities in consultation with village officials and other knowledgeable residents. As shown in Table 1, the following sample sizes were achieved: Akhiok, 35.3 percent; Karluk, 70.4 percent; Larsen Bay, 71.2 percent; Old Harbor, 37.0 percent; Ouzinkie, 54.8 percent; and Port Lions, 72.2 percent. As shown in Table 1, with the exception of Port Lions and Ouzinkie, the percentage of the households surveyed for the 1986 study year was lower than that achieved for 1983. Although not known for certain, unavailability of households and refusals probably explain why larger sample sizes were not achieved for 1986. Thus, the samples for 1986 must be considered non-random and opportunistic.

## Data Analysis and Limitations

Division of Subsistence staff coded the data from the survey forms and the data were entered for computer analysis. Harvest quantities in numbers of fish, animals, or gallons were converted into pounds usable weight in order to measure and compare the subsistence production of each sample. Factors used for these conversions appear in Appendix C.

Data analysis encountered several obstacles, primarily resulting from ambiguous responses on the survey forms that had not been edited before transmittal to the division's data management staff. Because of personnel changes at KANA, it was not possible to **clarify** certain questions with the field staff itself. Consequently, division staff had to perform substantial editing prior to the data analysis. Primary areas of concern were:

1. On some surveys, respondents indicated using and receiving a resource and reported a quantity, but left the "attempt to harvest" cell blank. In all cases, we have interpreted the quantity as pertaining to use (that is, the resources were received from other households) and have consequently coded harvest as zero. If we were in error in this interpretation, it may have reduced reported per capita harvests for some villages.
2. In some cases, harvest reporting units were unclear. For example, the form asked for salmon harvests in numbers of fish, but in some cases, the harvest quantity was so much higher than those of other respondents, it appeared that pounds of fish rather than numbers were being reported. In other cases where buckets of marine invertebrates was the requested reporting unit, it appeared that number of individual resources was reported instead (e.g. 100 clams rather than 2 buckets). In almost all of these cases, the more conservative harvest quantity was coded for analysis.
3. Because of concerns regarding confidentiality, the division did not receive copies of the original lists of village households, nor did we receive an estimate from the field workers of the percentage of each village's households that were surveyed. In order to report sampling fractions, therefore, we have estimated the total number of households in each community at the time of the survey by

dividing the 1986 population as reported by the Alaska Department of Labor (1989) by the average household size of the surveyed households.

Despite these problems, we believe that the survey results, if used in combination with the **1982/83** data, provide reasonable estimates of harvest levels, levels of participation, and species used in most communities in 1986. As will be noted again below, there are both similarities and differences in the **1982/83** and 1986 **survey** results. Possible explanations for these contrasts are discussed in the final section of this report.

One exception to this general level of confidence concerns the results for Akhiok. Only a 35.3 percent sample (12 of 34 households) was achieved, in comparison with 78 percent in 1983. The results of the two surveys differ more markedly for Akhiok in terms of harvest quantities and harvest composition than for any other community. It is possible that households that harvest large quantities of subsistence products were underrepresented in the sample, but this is not to discount the possibility that a real change occurred. Only further **harvest** data collection could remove the uncertainty about the Akhiok results.

## HARVEST PAT-TERNS IN 1986

### Akhiok

Only 12 of the approximately 34 households in Akhiok were interviewed about their 1986 subsistence harvests. This is 35.3 percent sample of the community's households. As noted above, there are reasons to believe that the results of these interviews may not be representative of the community overall. The mean household **harvest** of 581.7 pounds (Table 2) and the per capita harvest of 162.4 pounds were the lowest of the six samples and, as discussed below, substantially lower than those reported for **1982/83** when Akhiok's per capita take of wild foods (519.5 pounds) was second only to Karluk among Kodiak communities. In 1986, salmon made up 68.5 percent of the Akhiok sample's **harvest** (Fig. 2), by far the most of any resource category. Game was second with 19.2 percent of the **harvest**, followed by marine invertebrates (6.2 percent), other fish (4.3 percent), marine mammals (0.9 percent), birds and eggs (0.6

percent), and wild plants (0.6 percent). The resource taken in the greatest quantity was **coho** salmon (182.8 pounds per household), followed by sockeye salmon (160.5 pounds), and deer (111.8 pounds) (Table 2). Overall, 91.7 percent of the sampled households in Akhiok used wild foods in 1986, 83.3 percent attempted a harvest, and 83.3 percent were successful harvesters. Also, 33.3 percent of the households received gifts **of fish and game from others** and **58.3 percent** gave **away** wild resources (Table 2). On **average**, households in Akhiok used 8.00 kinds of wild **resources** in 1986 (Table 3). **This was, by far**, the lowest average of the six **study** communities. Also, Akhiok households attempted to **harvest** 6.92 kinds of resources, harvested 6.75 kinds, received 1.67 kinds, and gave away 3.92 kinds.

#### Karluk

The 19 surveyed Karluk households (70.4 percent of the estimated number of households in the community) averaged a harvest of **1,540.6** pounds of wild foods in 1986 (Table 4). This is a per capita harvest of 385.2 pounds, third highest among the six samples. The harvest composition was as follows (Fig. 3): salmon, 66.2 percent; game, 11.7 percent; other fish, 11.0 percent; marine mammals, 6.6 percent; marine invertebrates, 3.2 percent; birds and eggs, 0.7 percent; and plants, 0.5 percent. Resources which contributed the most to the harvests included sockeye salmon (760.7 pounds per household), deer (140 pounds), **coho** salmon (129.6 pounds), halibut (114.3 pounds), and pink salmon (67.4 pounds). Every Karluk household in the sample used and harvested wild foods in 1986. Also, 94.7 percent of the households received subsistence products from other households and 78.9 percent gave resources away (Table 4). As shown in Table 3, Karluk households, on average, used 13.74 kinds of wild resources in 1986, very similar to the averages of Larsen Bay, Old Harbor, and Port Lions. These households attempted to harvest an average of 8.21 types of wild resources, harvested 8.11 kinds, received 6.63 kinds, and gave away 4.26 kinds.

#### Larsen Bay

The 37 households interviewed in Larsen Bay make up about 71.2 percent of the estimated community total. The average harvest of wild foods for these households was 683.4 pounds in 1986, 209.0



pounds per capita (Table 5). This harvest level ranked fifth among the six samples. Salmon made up the largest portion of the harvest, 48.7 percent (Fig. 4), followed by game (18.9 percent), other fish (17.1 percent), marine invertebrates (11.5 percent), wild plants (1.7 percent), marine mammals (1.6 percent), and birds and eggs (0.4 percent). Individual resources which contributed the most to the community's 1986 harvest were sockeye salmon (173.9 pounds per household), deer (112.8 pounds), coho salmon (107.8 pounds), halibut (89.5 pounds), and butter clams (34.6 pounds). Overall, 97.3 percent of the sampled Larsen Bay households used wild foods in 1988, 83.8 percent hunted, fished or gathered, and 81.1 percent were successful harvesters. Also, 86.5 percent of the households received subsistence products from other households and 59.5 percent gave resources away (Table 5). On average, households in Larsen Bay used 13.84 kinds of wild resources in 1986, the second-highest average among the six study communities but very similar to that of Karluk, Old Harbor, and Port Lions. Also, these households attempted to harvest 7.59 kinds of wild resources, harvested 7.32 kinds, received 8.68 types, and gave away 3.32 kinds.

#### Old Harbor

Forty-four households were interviewed in Old Harbor, about 37 percent of the estimated community total. This sample averaged a harvest of **1,346.7** pounds of wild foods per household in 1986, with a per capita **harvest** of 423.2 pounds (Table 6). This was the largest per capita harvest of the six samples. The resource category making up the largest portion of the harvest was salmon (44.3 percent) (Fig. 5), followed by marine mammals (25.1 percent), game (14.2 percent), other fish (9.8 percent), marine invertebrates (5.5 percent), birds and eggs (0.8 percent), and wild plants (0.3 percent). Resources which were taken in the largest quantities were sea lion (270.9 pounds per household), coho salmon (269.5 pounds), deer (160.8 pounds), chum salmon (140.6 pounds), and halibut (101.3 pounds). In terms of participation in **harvest** activities, 100 percent of the interviewed households in Old Harbor used **wild** foods in 1986, 97.7 percent attempted harvests, 97.7 percent were successful harvesters, 81.8 percent received resources, and 79.5 percent gave resources away (Table 6). As reported in Table 3, the average number of resources used per household in Old Harbor in 1986 was 13.66, very similar to the averages for Karluk,

Larsen Bay, and Port Lions. On average, Old Harbor households attempted to harvest 10.14 kinds of wild resources, harvested 9.89 kinds, received 7.50 kinds, and gave away 5.36 kinds.

### Ouzinkie

The 34 interviewed households in Ouzinkie (54.8 percent of the estimated number of households in the community) harvested an average of **1,267.7** pounds of wild foods in 1986 (**Table 7**). The per capita harvest was 402.8 pounds, second only to Old Harbor among the six samples. Salmon made up 47.8 percent of this harvest, more than any other resource category (Fig. **6**), followed by game (17.4 percent), other fish (17.0 percent), marine mammals (7.4 percent), marine invertebrates (7.0 percent), birds and eggs (2.2 percent), and wild plants (1.2 percent). Specific resources which contributed the most to the community's harvests were **coho** salmon (277.3 pounds per household), sockeye salmon (184.2 pounds), deer (180.1 pounds), halibut (101.5 pounds), and chum salmon (88.2 pounds). Overall, 94.1 percent of the sampled Ouzinkie households used wild foods in 1986. while 91.2 percent hunted, fished or gathered, 91.2 percent were successful harvesters, 79.4 percent received gifts of wild foods, and 47.1 percent shared subsistence foods with other households (Table 7). With an average number of resources used per household of 17.00, Ouzinkie had the most diverse range of resource use in 1986 of any of the six study communities (Table 3). **On** average, Ouzinkie households attempted to **harvest** 13.32 kinds of resources, hawested 12.53 kinds, received 8.19 types, and gave away 5.06 kinds.

### Port Lions

Sixty **five** households were interviewed in Port Lions, about 72.2 percent of the estimated community total. These households had an average subsistence harvest of **1,096.7** pounds in 1986 (Table 8). The per capita harvest was 333.1 pounds, fourth among the six samples. The harvest composition was as follows. Salmon was the resource category contributing the most pounds to the total harvest (48.0 percent) (Fig. 7), followed by game (22.1 percent), other fish (16.5 percent), marine invertebrates (9.7 percent), marine mammals (1.9 percent), wild plants (1.1 percent), and birds and eggs (0.6 percent). The resources harvested in the largest quantities were **coho** salmon (252.6 pounds per household), sockeye salmon

(156.1 pounds), deer (151.6 pounds), halibut (130 pounds), and elk (51.9 pounds). Of the 65 households in the Port Lions sample, 96.5 percent used wild foods in 1986, 93.8 percent attempted a harvest in 1986, 93.8 percent successfully harvested fish, game, or plants, 86.2 percent received wild foods from other households, and 75.4 percent gave wild resources away (Table 8). On average, Port Lions households used 13.00 kinds of wild resources in 1986, about the same as Karluk, Larsen Bay, and Old Harbor (Table 3). Also, these households **tried** to harvest 9.91 kinds of wild resources, harvested 9.28 kinds, received 5.78 kinds, and gave away 4.38 kinds.

#### SOURCES OF SALMON, 1986

Salmon harvests in 1986 for each community were reported on the survey form from three sources: removal from commercial catch, subsistence methods (set nets and “other subsistence methods”, probably beach seining for the most part), and rod and reel. This **was the** first attempt to quantify the amount of salmon removed from commercial harvests for local use in Kodiak Borough communities. As reported in Tables 9 through 14, sources of salmon varied between communities and between species. In Akhiok, for example (Table 9; Fig. 8), almost all (96 percent, as measured in numbers of fish) of the 1986 salmon harvest was taken by subsistence methods, just four percent using rod and reel, and none were removed from commercial harvests. A similar pattern appeared in Karluk (Table 10; Fig. 9), where subsistence methods accounted for 94 percent of the total salmon harvest, rod and reel provided two percent, and commercial catches only four percent.

In the other four communities, however, removal from commercial catches provided a substantial portion of the salmon harvest for home use in 1986, accounting for over half of the catch in Larsen Bay (52 percent; Table 11, Fig. 10) and Old Harbor (60 percent; Table 12, Fig. 11) and almost a third in Ouzinkie (30 percent; Table 13, Fig. 12) and Port Lions (29 percent; Table 14, Fig. 13). But in all these communities, too, subsistence harvesting methods also provided large quantities of salmon, including 45 percent of the salmon at Larsen Bay, 30 percent at Old Harbor, 59 percent at Ouzinkie, and 54 percent at Port Lions.

Finally, rod and reel catches in these four communities ranged from three percent of the total salmon harvest in Karluk to 17 percent at Port Lions. The rod and reel method was particularly noteworthy for certain species in some communities. such as silver **salmon** and pink salmon at Port Lions and Ouzinkie. A large percentage of the silver salmon taken by Ouzinkie residents are caught with rod and reel because of the prohibition against using nets and seines in Katmai Creek (**5 AAC 01.525[9]**).

## COMPARISON OF **1982/83** AND 1986 HARVEST AND USE DATA

### Levels of Participation in Harvest and Use

In 1986, as in **1982/83**, virtually every sampled household in the six Kodiak Island Borough villages used wild foods and participated in the harvest of these resources. As shown in Figure 14, in **1982/83**, all the sampled Akhiok households used and harvested wild foods. In 1986, 91.7 percent used wild resources and 83.3 percent harvested them. In Karluk, every sampled household in **1982/83** and 1986 used wild resources; 95 percent harvested fish and game in **1982/83**, and 100 percent in 1986. All of the Larsen Bay sample used and harvested wild foods in **1982/83**. In 1986, 97.3 percent used and 81 .1 percent harvested these resources. Likewise, all of the sampled Old Harbor households used and harvested fish and game in **1982/83**. In 1986, 100 percent of the Old Harbor sample used wild foods and 97.7 percent harvested them. The results for Ouzinkie had a similar pattern. All the sampled households used and harvested fish and game in **1982/83**, while in 1986, 94.1 percent of the sample used wild foods and 91.2 percent harvested them. Finally, for Port Lions, all of the sample used wild resources in 1983, while 98.5 percent did so in 1986. In **1982/83**, 98.2 percent of the interviewed Port Lions households harvested wild foods: 93.8 percent were successful harvesters in 1986.

### Harvest Quantities

Table **15** compares estimated mean household and per capita harvests for interviewed households in the six Kodiak Borough communities for **1982/83** and 1986. Figure 15 compares per capita harvests for the two study years. One community, Port Lions, showed a notable increase in harvest of 19.0 percent,

from 279.8 pounds per person in **1982/83** to 333.1 pounds in 1986. Ouzinkie's harvest increased about 9.1 percent, from 369.1 pounds per person to 402.8 pounds. On the other hand, the Old Harbor sample's harvest of 423.2 pounds per person in 1986 was about 13.8 percent lower than the 491 .1 pounds reported by the **1982/83** sample.

The other three samples reported 1966 harvests that were much less than those estimated for households from the same communities in **1982/83**. The 1986 harvest of the sampled Larsen Bay households, as measured in pounds per person, was only 51.8 percent of that of **1982/83** (a decrease of 48.2 percent); Karluk's 1986 per capita **harvest** was 44.6 percent of that of **1982/83** (down 55.4 percent); and Akhiok's estimated 1986 harvest was **only 31.3** percent of that of **1982/83** (down 68.7 percent).

Based on only two year's survey data and limited samples in some communities, it is premature to discuss between-year variability or trends in Kodiak Island Borough subsistence **harvests**.<sup>2</sup> It is interesting to note, however, that of the 12 total estimates for the two years, 7 (from five communities) cluster in the 300-500 pound per capita range. Two estimates are above 500 pounds and three are below 300 pounds. As will be discussed below, harvest estimates for a number of other southern Alaska coastal communities are also in this range 300 - 500 pounds per person range.

### Harvest Composition

Harvest composition refers to the relative portions of each sample's **harvest**, as measured in pounds edible weight, represented by each resource category.<sup>3</sup> The results for Akhiok (Fig. 2), as with harvest quantities (Table 16), show the greatest contrasts between the two years' harvests. Salmon made up 45 percent of the Akhiok sample's harvest in 1983, but increased to 69 percent in 1986. Game's contribution also increased, from 8 percent in 1983 to 19 percent in 1986. Conversely, marine mammals dropped sharply from 30 percent of the total pounds in 1983 to just one percent in 1986.

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<sup>2</sup> As noted above, since this report was finalized, **harvest** surveys pertaining to 1989 were conducted in the six villages. Surveys were conducted in some of the Kodiak Island Borough communities for **1990/91** and **1991/92** as well. Comparisons of **harvest** estimates based upon these surveys will be the topic of future Division of Subsistence technical papers.

<sup>3</sup> Note that data on plant harvest quantities were not collected for **1982/83**. Because plant harvests are generally a relatively small portion of total subsistence harvests, this does not significantly affect comparisons of the two study years.

With a few exceptions, the composition of the reported harvests for 1983 and 1986 for the samples from Karluk, Larsen Bay, Old Harbor, and Ouzinkie were quite stable (Figs. 3-7). Larsen Bay showed a relative increase in salmon as a contributor to harvests (43 percent of the total in 1983, 48 percent in 1986) and a large decline in marine mammals (14 percent in **1982/83**, 2 percent in 1986) (Fig. 4). In contrast, the relative contribution of marine mammals to Old Harbor's harvest was higher in 1986 (25 percent) than in 1983 (16 percent) (Fig. 5). The significance of game at Ouzinkie increased from 11 percent in 1983 to 17 percent in 1986, largely at the expense of marine invertebrates, which fell from 14 percent to 7 percent of the harvest (Fig. 6).

Comparisons of the data for the two Port Lions samples reveal some shifts in **harvest** composition. In **1982/83**, in contrast to every other community, "other fish" made up the largest portion of the harvest at Port Lions, 35 percent. This percentage fell to 17 percent in 1986, while salmon rose from **35 percent in 1982/83** (notably lower than the other five communities) to 47 percent in 1986 (very similar to Larsen Bay, Old Harbor, and Ouzinkie). The relative contribution of game also was higher in 1986 (22 percent) in comparison with 1983 (13 percent) (Fig. 7).

In summary, a comparison of the 1986 data with that of **1982/83** shows that salmon remained the largest portion of subsistence harvests in Kodiak Island communities, with this resource category's share of the harvest in 1986 remaining about the same as in **1982/83** in some communities (Karluk, Old Harbor, Ouzinkie) and increasing in others (Akhiok, Larsen Bay, Port Lions). The portion of community **harvests** made up of game (mostly deer) increased notably in every community except Old Harbor, where the proportion was the same in **1982/83** and 1986. In contrast, the percentage of the harvests made up of marine mammals decreased in four communities (Akhiok, Karluk, Larsen Bay, and Port Lions), remained the same in one (Ouzinkie), and increased in one (Old Harbor). Declining marine mammal populations along Shelikof Strait may in part account for this overall decline. The relative contributions of fish other than salmon and marine invertebrates to harvest in **1982/83** and 1986 were fairly consistent, with a few exceptions. These included the **19** percentage point difference between "other fish" harvests in Port Lions in **1982/83** and 1986, and a 7 percentage point difference between marine invertebrate harvests at Ouzinkie.

## COMPARISONS WITH OTHER GULF OF ALASKA COMMUNITIES

Table 17 and Figure 16 report per capita harvest estimates for other Gulf of Alaska communities based upon other Division of Subsistence research in the 1980s. With the exception of Akhiok, the range of per capita harvests from about 209 to 423 pounds for the other Kodiak communities in 1986 is quite consistent with findings for the predominantly Native communities of Alaska's southern coast. Excluding the large or mostly non-Native places (Cordova, Kenai, Ninilchik, Homer, Seldovia, Kodiak City, Chiniak), of the remaining 12 communities,<sup>4</sup> only one, Chignik reported a per capita harvest under 200 pounds (188 pounds), six had harvests from 200-299 pounds (like Larsen Bay in 1986), three had harvests in the 300 pound range (like Port Lions and Karluk), two were in the 400 pound range like Ouzinkie and Old Harbor, and one (Tatitlek in 1988/89) was above 500 pounds (644 pounds per person).

## CONCLUSIONS

The results of the 1986 harvest survey conducted by KANA demonstrate that households in the six predominantly Alaska Native communities of the Kodiak Island Borough harvest and use relatively large quantities of wild fish, game, and plant resources. Harvest estimates are generally consistent with those reported for other Gulf of Alaska communities whose population is predominantly Alaska Native. Virtually every household in Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions used wild foods in 1986, and the vast majority harvested fish and game as well. As measured in pounds edible weight, salmon contributed the most to the subsistence harvests in all six villages, but substantial quantities of other fish, game, marine invertebrates, birds, and, in some communities, marine mammals, were taken as well. Resource harvests in all six villages were quite diverse in terms of the number of different kinds of

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<sup>4</sup> Note that there are two annual harvest estimates for Tatitlek. Subsistence harvests which occurred after the Exxon Valdez oil spill of March 1989 are excluded from this comparison.

foods that were harvested and used during the 1986 study year. All of these findings are consistent with data presented for Kodiak Island Borough harvests for **1982/83**.

Differences between the **1982/83** and 1986 survey results for these six Kodiak communities also appeared, especially regarding harvest quantities and harvest composition. Future research would be necessary to determine if these **differences** were a product of sampling procedures, represent year to year fluctuations in subsistence activities, or indicate trends towards decreasing or increasing subsistence harvests for particular species.



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TABLE 1. POPULATION AND SAMPLE SIZES FOR 1983 AND 1986 STUDY YEARS, KODIAK ISLAND BOROUGH COMMUNITIES.

	<u>Population<sup>a</sup></u>		<u>1983 Harvest Survey</u>			<u>1986 Harvest Survey</u>		
	<u>1983</u>	<u>1986</u>	<u>Ttl # HHs</u>	<u># HHs Srvyd</u>	<u>% HHs Srvyd</u>	<u>Ttl # HHs<sup>b</sup></u>	<u># HHs Srvyd</u>	<u>% HHs Srvyd</u>
Akhiok	103	123	27	21	77.8	34	12	35.3
Karluk	103	107	26	20	76.9	27	19	70.4
Larsen Bay	179	169	43	32	74.4	52	37	71.2
Old Harbor	356	380	94	76	80.9	119	44	37.0
Ouzinkie	234	195	70	32	45.7	62	34	54.8
Port Lions	290	296	89	55	61.8	90	65	72.2
Total	1,265	1,270	349	236	67.6	384	211	54.9

<sup>a</sup> Sources: for 1983, based on KANA survey data (Scott et al 1992); for 1986, Alaska Department of Labor 1989.

<sup>b</sup> Calculated by dividing the 1986 population by the average household size of the 1986 sample.

Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Athllok, 1986

Number of Households Sampled = 12.00      Estimated Number of People in Community = 121.83  
 Number of Households in Community = 34.00

Resource Name	Use	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
		Alt	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
ALL RESOURCES	91.70	83.30	83.30	33.30	58.30	19779	581.74	162.35	19779	Pounds	581.74	35%
FISH	83.30	83.30	83.30	8.30	50.00	14418	424.06	118.34	14418	Pounds	424.06	44%
FISH [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
FISH [Non-Commercial Gear]					0.00	13156	386.94	107.98	13156	Pounds	386.94	49%
FISH [Rod and Reel]						1262	37.12	10.36	1262	Pounds	37.12	64%
SALMON	83.30	83.30	83.30	8.30	50.00	13559	398.79	111.29	2788	Individual	82.00	42%
Salmon [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Salmon [Non-Commercial Gear]					0.00	12776	375.76	104.86	2666	Individual	78.41	44%
Salmon [Rod and Reel]						783	23.03	6.43	122	Individual	3.59	81%
Chum Salmon	25.00	41.70	25.00	0.00	25.00	714	21.00	5.86	130	Individual	3.82	105%
Chum Salmon [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Chum Salmon [Non-Commercial Gear]					0.00	714	21.00	5.86	130	Individual	3.82	105%
Chum Salmon [Rod and Reel]						0	0.00	0.00	0		0.00	
Coho Salmon	75.00	75.00	75.00	8.30	50.00	6217	182.85	51.03	952	Individual	28.00	80%
Coho Salmon [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Coho Salmon [Non-Commercial Gear]					0.00	5458	160.53	44.80	836	Individual	24.59	94%
Coho Salmon [Rod and Reel]						759	22.32	6.23	116	Individual	3.41	86%
Chinook Salmon	0.00	0.00	33.30	0.00	0.00	0	0.00	0.00	0		0.00	
Chinook Salmon [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Chinook Salmon [Non-Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Chinook Salmon [Rod and Reel]						0	0.00	0.00	0		0.00	
Pink Salmon	50.00	66.70	50.00	0.00	33.30	1171	34.44	9.61	434	Individual	12.76	66%
Pink Salmon [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Pink Salmon [Non-Commercial Gear]					0.00	1171	34.44	9.61	434	Individual	12.76	66%
Pink Salmon [Rod and Reel]						0	0.00	0.00	0		0.00	
Sockeye Salmon	66.70	83.30	66.70	8.30	33.30	5458	160.53	44.80	1272	Individual	37.41	62%
Sockeye Salmon [Commercial Gear]					0.00	0	0.00	0.00	0		0.00	
Sockeye Salmon [Non-Commercial Gear]					0.00	5433	159.79	44.59	1267	Individual	37.26	62%
Sockeye Salmon [Rod and Reel]					8.30	24	0.71	0.20	6	Individual	0.18	150%
Salmon Roe	8.30	8.30	8.30	0.00	0.00							
Salmon Roe [Non-Commercial Gear]												
Salmon Roe [Rod and Reel]												

Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Akhiok, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Non-Salmon Fish	41.70	33.30	33.30	8.30	33.30	859	25.26	7.05	859 Pounds		25.26	93%
Non-Salmon [Commercial Gear]			0.00		0.00	0	0.00	0.00	0		0.00	
Non-Salmon [Non-Commercial Gear]			16.70			380	11.18	3.12	380 Pounds		11.18	106%
Non-Salmon [Rod and Reel]			25.00			479	14.09	3.93	479 Pounds		14.09	106%
Cod	8.30	8.30	8.30	0.00	8.30	181	5.32	1.49	57 Individual		1.68	156%
Cod [Non-Commercial Gear]			8.30			181	5.32	1.49	57 Individual		1.68	156%
Cod [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Tom Cod	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Tom Cod [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Tom Cod [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Unknown Cod	8.30	8.30	8.30	0.00	8.30	181	5.32	1.49	57 Individual		1.68	156%
Unknown Cod [Non-Commercial Gear]			8.30			181	5.32	1.49	57 Individual		1.68	156%
Unknown Cod [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Flounder	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Flounder [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Flounder [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Sole	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sole [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Sole [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Halibut	33.30	33.30	25.00	8.30	25.00	567	16.68	4.65	567 Pounds		16.68	84%
Halibut [Commercial Gear]			0.00		0.00	0	0.00	0.00	0		0.00	
Halibut [Non-Commercial Gear]			8.30			198	5.82	1.63	9 Individual		0.26	144%
Halibut [Rod and Reel]			8.30			368	10.82	3.02	11 Individual		0.32	109%
Herring	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Herring [Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Herring [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Herring [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Roe on Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Roe on Kelp [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Roe on Kelp [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Rockfish	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Rockfish [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Red Rockfish	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Red Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Red Rockfish [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	

Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Alaska, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	Mean HH	Harvest
Sea Bass	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0.00	
Sea Bass [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Sea Bass [Rod and Reel]			0.00			0	0.00	0	0.00	0.00	
Unknown Rockfish	0.00	0.00	0.00		0.00	0	0.00	0	0.00	0.00	
Unknown Rockfish [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Unknown Rockfish [Rod and Reel]			0.00			0	0.00	0	0.00	0.00	
Irish Lord	0.00	0.00	0.00		0.00	0	0.00	0	0.00	0.00	
Irish Lord [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Irish Lord [Rod and Reel]			0.00			0	0.00	0	0.00	0.00	
Eel	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0.00	
Eel [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Eel [Rod and Reel]			0.00			0	0.00	0	0.00	0.00	
Shark	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0.00	
Shark [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Shark [Rod and Reel]			0.00			0	0.00	0	0.00	0.00	
Pollock	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0.00	
Pollock [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Pollock [Rod and Reel]			0.00			0	0.00	0	0.00	0.00	
Trout and Char	16.70	16.70	16.70	0	6.70	111	3.26	111	Individual	2.32	117%
Trout and Char [Non-Commercial Gear]			0.00	0		0	0.00	0	0.00	0.00	
Trout and Char [Rod and Reel]	8.30	8.30	16.70	0	8.30	111	3.26	111	Individual	2.32	117%
Char	8.30	8.30	8.30	0	8.30	79	2.32	79	Individual	1.68	156%
Char [Non-Commercial Gear]			0.00			0	0.00	0	0.00	0.00	
Char [Rod and Reel]			8.30			79	2.32	79	Individual	1.68	156%
Dolly Varden	8.30	8.30	8.30	0	8.30	79	2.32	79	Individual	1.68	156%
Dolly Varden [Non-Commercial Gear]			0.00	0		0	0.00	0	0.00	0.00	
Dolly Varden [Rod and Reel]			8.30			79	2.32	79	Individual	1.68	156%
Trout	8.30	8.30	8.30	0	8.30	79	2.32	79	Individual	1.68	110%
Trout [Non-Commercial Gear]			4.20	0		32	0.94	32	Individual	0.68	156%
Trout [Rod and Reel]			8.30			32	0.94	32	Individual	0.68	156%
Lake Trout	8.30	8.30	8.30	0	8.30	32	0.94	32	Individual	0.68	156%
Lake Trout [Non-Commercial Gear]			0.00	0		0	0.00	0	0.00	0.00	
Lake Trout [Rod and Reel]			8.30			32	0.94	32	Individual	0.68	156%
Rainbow Trout	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0.00	
Rainbow Trout [Non-Commercial Gear]			0.00	0	0.00	0	0.00	0	0.00	0.00	
Rainbow Trout [Rod and Reel]			0.00	0	0.00	0	0.00	0	0.00	0.00	

Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Alaska, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	
Steelhead	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Steelhead [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00	
Steelhead [Rod and Reel]			0.00			0	0.00	0.00	0	0.00	
Unknown Trout	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Unknown Trout [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00	
Unknown Trout [Rod and Reel]			0.00			0	0.00	0.00	0	0.00	
<b>GAME</b>	58.30	58.30	50.00	16.70	41.70	3800	111.76	31.19	77 Individual	2.26	68%
Big Game	58.30	58.30	50.00	16.70	41.70	3800	111.76	31.19	77 Individual	2.26	68%
Brown Bear	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Caribou	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Deer	58.30	58.30	50.00	16.70	41.70	3800	111.76	31.19	77 Individual	2.26	68%
Elk	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Goat	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Moose	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Reindeer	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Sheep	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Small Game/Furbearer	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Fox	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Red Fox	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Beaver	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Hare	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Land Otter	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Weasel	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
<b>MARINE MAMMALS</b>	25.00	16.70	16.70	16.70	16.70	184	5.41	1.51	11 Individual	0.32	109%
Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Black Fin Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Seal	25.00	16.70	16.70	16.70	8.30	57	1.68	0.47	6 Individual	0.18	100%
Harbor Seal	25.00	16.70	16.70	16.70	8.30	57	1.68	0.47	6 Individual	0.18	100%
Sea Lion	25.00	16.70	16.70	16.70	16.70	128	3.76	1.05	6 Individual	0.18	100%
Sea Otter	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
<b>BIRDS AND EGGS</b>	33.30	33.30	25.00	8.30	8.30	43	1.26	0.35	99 Individual	2.91	96%
Upland Game Birds	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Ptarmigan	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	



Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Atliok, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Chitons-Non Commercial Bidarkis (large) Bidarkis (large)-Non Commercial Octopus Octopus-Non Commercial Sea Cucumber Sea Cucumber-Non Commercial Sea Urchin Sea Urchin-Non Commercial Shrimp Shrimp-Commercial Shrimp-Non Commercial Snails Snails-Non Commercial Limpets Limpets-Non Commercial	25.00	16.70	16.70	8.30	0.00	27	0.79	0.22	3	6 Gal Bckt	0.09	100%
	25.00	16.70	16.70	8.30	0.00	27	0.79	0.22	3	6 Gal Bckt	0.09	100%
	25.00	16.70	16.70	8.30	0.00	27	0.79	0.22	3	6 Gal Bckt	0.09	100%
	58.30	50.00	50.00	8.30	25.00	272	8.00	2.23	68	Individual	2.00	54%
	58.30	50.00	50.00	8.30	25.00	272	8.00	2.23	68	Individual	2.00	54%
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
	58.30	50.00	50.00	8.30	41.70	145	4.26	1.19	48	6 Gal Bckt	1.41	54%
	58.30	50.00	50.00	8.30	41.70	145	4.26	1.19	48	6 Gal Bckt	1.41	54%
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
PLANTS AND BERRIES	58.30	58.30	58.30	0.00	0.00	116	3.41	0.95	116	Pounds	3.41	58%
Berries	58.30	58.30	58.30	0.00	0.00	116	3.41	0.95	116	Quarts	3.41	58%
Plants/Greens/Mushrooms	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Seaweed/Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	

SOURCE: Alaska Dept. of Fish and Game, Division of Subsistence, Household Surveys, 1987.



TABLE 3. AVERAGE NUMBER OF TYPES OF RESOURCES USED, ATTEMPTED TO HARVEST, HARVESTED, RECEIVED, AND GIVEN AWAY PER HOUSEHOLD, KODIAK ISLAND BOROUGH STUDY COMMUNITIES, 1986

	<u>Average Number of Resources per Household</u>				
	<u>Used</u>	<u>Attempted</u>	<u>Harvested</u>	<u>Received</u>	<u>Gave Away</u>
Akhiok	8.00	6.92	6.75	1.67	3.92
Karluk	13.74	8.21	8.11	6.63	4.26
Larsen Bay	13.84	7.59	7.32	8.68	3.32
Old Harbor	13.66	10.14	9.89	7.50	5.36
Ouzinkie	17.00	13.32	12.53	8.18	5.06
Port Lions	13.00	9.91	9.28	5.78	4.38

Source: Division of Subsistence Household Survey 1987

Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Karluk, 1986

Estimated Number of People in Community = 108.00

Number of Households Sampled = 19.00  
Number of Households in Community = 27.00

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	
ALL RESOURCES	100.00	100.00	100.00	94.70	78.90	41597	1540.63	385.16	41597 Pounds	1540.63	21%
FISH	94.70	94.70	94.70	78.90	78.90	32106	1189.11	297.28	32106 Pounds	1189.11	19%
FISH [Commercial Gear]			15.80		5.30	1471	54.48	13.62	1471 Pounds	54.48	91%
FISH [Non-Commercial Gear]			89.50			26309	974.41	243.60	26309 Pounds	974.41	19%
FISH [Rod and Reel]			52.80			4326	160.22	40.06	4326 Pounds	160.22	45%
SALMON	94.70	89.50	89.50	68.40	78.90	27530	1019.63	254.91	6163 Individual	228.26	20%
Salmon [Commercial Gear]			15.80		5.30	1187	43.96	10.99	252 Individual	9.33	88%
Salmon [Non-Commercial Gear]			84.20			25866	958.00	239.50	5761 Individual	213.37	20%
Salmon [Rod and Reel]			15.80			478	17.70	4.43	151 Individual	5.59	101%
Chum Salmon	10.50	15.80	5.30	5.30	5.30	156	5.78	1.44	28 Individual	1.04	107%
Chum Salmon [Commercial Gear]			0.00		0.00	0	0.00	0.00	0	0.00	
Chum Salmon [Non-Commercial Gear]			5.30			156	5.78	1.44	28 Individual	1.04	107%
Chum Salmon [Rod and Reel]			0.00			0	0.00	0.00	0	0.00	
Coho Salmon	73.70	57.90	52.60	36.80	36.80	3498	129.56	32.39	536 Individual	19.85	40%
Coho Salmon [Commercial Gear]			10.50		0.00	278	10.30	2.57	43 Individual	1.59	76%
Coho Salmon [Non-Commercial Gear]			47.40			3220	119.26	29.81	493 Individual	18.26	42%
Coho Salmon [Rod and Reel]			0.00			0	0.00	0.00	0	0.00	
Chinook Salmon	63.20	57.90	57.90	21.10	21.10	1519	56.26	14.06	138 Individual	5.11	53%
Chinook Salmon [Commercial Gear]			5.30		0.00	94	3.48	0.87	9 Individual	0.33	100%
Chinook Salmon [Non-Commercial Gear]			42.10			1331	49.30	12.32	121 Individual	4.48	61%
Chinook Salmon [Rod and Reel]			15.80			94	3.48	0.87	9 Individual	0.33	66%
Pink Salmon	36.80	42.10	31.60	15.80	15.80	1819	67.37	16.64	674 Individual	24.96	61%
Pink Salmon [Commercial Gear]			5.30		0.00	77	2.85	0.71	28 Individual	1.04	107%
Pink Salmon [Non-Commercial Gear]			26.30			1358	50.30	12.57	503 Individual	18.63	65%
Pink Salmon [Rod and Reel]			5.30			384	14.22	3.56	142 Individual	5.26	107%
Sockeye Salmon	89.50	84.20	84.20	52.60	73.70	20538	760.67	190.17	4788 Individual	177.33	21%
Sockeye Salmon [Commercial Gear]			15.80		5.30	738	27.33	6.83	172 Individual	6.37	88%
Sockeye Salmon [Non-Commercial Gear]			78.90			19801	733.37	183.34	4616 Individual	170.96	21%
Sockeye Salmon [Rod and Reel]			0.00		0.00	0	0.00	0.00	0	0.00	
Salmon Roe	0.00	0.00	0.00	0.00	0.00						
Salmon Roe [Non-Commercial Gear]			0.00								
Salmon Roe [Rod and Reel]			0.00								

Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Karluk, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Cont. Limit Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Units	Mean HH
Non-Salmon Fish	84.20	52.60	52.60	47.40	31.60	4575	169.44	42.36	4576 Pounds	169.48
Non-Salmon [Commercial Gear]			5.30		0.00	284	10.52	2.63	284 Pounds	10.52
Non-Salmon [Non-Commercial Gear]			21.10			443	16.41	4.10	443 Pounds	16.41
Non-Salmon [Rod and Reel]			47.40			3848	142.52	35.63	3848 Pounds	142.52
Cod	42.10	15.80	15.80	26.30	10.50	112	4.15	1.04	70 Individual	2.59
Cod [Non-Commercial Gear]			10.50			6	0.22	0.06	13 Individual	0.48
Cod [Rod and Reel]			5.30			105	3.89	0.97	57 Individual	2.11
Tom Cod	21.10	15.80	15.80	5.30	10.50	21	0.78	0.19	41 Individual	1.52
Tom Cod [Non-Commercial Gear]			10.50			6	0.22	0.06	13 Individual	0.48
Tom Cod [Rod and Reel]			5.30			14	0.52	0.13	28 Individual	1.04
Unknown Cod	26.30	5.30	5.30	21.10	5.30	91	3.37	0.84	28 Individual	1.04
Unknown Cod [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Unknown Cod [Rod and Reel]			5.30			91	3.37	0.84	28 Individual	1.04
Flounder	31.60	21.10	21.10	5.30	5.30	362	13.41	3.35	121 Individual	4.48
Flounder [Non-Commercial Gear]			15.80			256	9.48	2.37	85 Individual	3.15
Flounder [Rod and Reel]			5.30			107	3.96	0.99	36 Individual	1.33
Sole	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Sole [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Sole [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Halibut	78.90	31.60	31.60	47.40	21.10	3087	114.33	28.58	3087 Pounds	114.33
Halibut [Commercial Gear]			5.30		0.00	284	10.52	2.63	284 Pounds	10.52
Halibut [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Halibut [Rod and Reel]			21.10			2803	103.81	25.95	86 Individual	3.19
Herring	0.00	5.30	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Herring [Commercial Gear]			0.00		0.00	0	0.00	0.00	0	0.00
Herring [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Herring [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Roe on Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Roe on Kelp [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Roe on Kelp [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Rockfish	10.50	5.30	5.30	5.30	0.00	26	0.96	0.24	17 Individual	0.63
Rockfish [Non-Commercial Gear]			5.30			26	0.96	0.24	17 Individual	0.63
Rockfish [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Red Rockfish	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Red Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Red Rockfish [Rod and Reel]			0.00			0	0.00	0.00	0	0.00

Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Kartuk, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested			95 % Conf. Limit (Yr)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest	
Sea Bass	10.50	5.30	5.30	5.30	0.00	26	0.96	0.24	17 Individual	17 Individual	0.63	105%	
Sea Bass [Non-Commercial Gear]			5.30			26	0.96	0.24	17 Individual	17 Individual	0.63	105%	
Sea Bass [Rod and Reel]			0.00			0	0.00	0.00	0	0	0.00		
Unknown Rockfish	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00		
Unknown Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Unknown Rockfish [Rod and Reel]			0.00			0	0.00	0.00	0	0	0.00		
Irish Lord	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00		
Irish Lord [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Irish Lord [Rod and Reel]			0.00			0	0.00	0.00	0	0	0.00		
Eel	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00		
Eel [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Eel [Rod and Reel]			0.00			0	0.00	0.00	0	0	0.00		
Shark	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00		
Shark [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Shark [Rod and Reel]			0.00			0	0.00	0.00	0	0	0.00		
Pollock	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00		
Pollock [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Pollock [Rod and Reel]			0.00			0	0.00	0.00	0	0	0.00		
Trout and Char	78.90	52.60	52.60	26.30	21.10	989	36.63	9.16	706 Individual	706 Individual	26.15	68%	
Trout and Char [Non-Commercial Gear]			21.10			155	5.74	1.44	111 Individual	111 Individual	4.11	65%	
Trout and Char [Rod and Reel]			36.80			833	30.85	7.71	595 Individual	595 Individual	22.04	81%	
Char	52.60	26.30	26.30	26.30	15.80	597	22.11	5.53	426 Individual	426 Individual	15.78	71%	
Char [Non-Commercial Gear]			10.50			139	5.15	1.29	99 Individual	99 Individual	3.67	74%	
Char [Rod and Reel]			15.80			458	16.96	4.24	327 Individual	327 Individual	12.11	92%	
Dolly Varden	52.60	26.30	26.30	26.30	15.80	597	22.11	5.53	426 Individual	426 Individual	15.78	71%	
Dolly Varden [Non-Commercial Gear]			5.30			139	5.15	1.29	99 Individual	99 Individual	3.67	53%	
Dolly Varden [Rod and Reel]			7.90			458	16.96	4.24	327 Individual	327 Individual	12.11	65%	
Trout	57.90	42.10	42.10	15.80	15.80	392	14.52	3.63	280 Individual	280 Individual	10.37	66%	
Trout [Non-Commercial Gear]			10.50			16	0.59	0.15	11 Individual	11 Individual	0.41	81%	
Trout [Rod and Reel]			31.60			376	13.93	3.48	269 Individual	269 Individual	9.96	69%	
Lake Trout	5.30	5.30	5.30	0.00	0.00	199	7.37	1.84	142 Individual	142 Individual	5.26	107%	
Lake Trout [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Lake Trout [Rod and Reel]			5.30			199	7.37	1.84	142 Individual	142 Individual	5.26	107%	
Rainbow Trout	5.30	5.30	5.30	0.00	0.00	40	1.48	0.37	28 Individual	28 Individual	1.04	107%	
Rainbow Trout [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0	0.00		
Rainbow Trout [Rod and Reel]			5.30			40	1.48	0.37	28 Individual	28 Individual	1.04	107%	

Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Karluk, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Alt	Harv	Recv	Give	Total	Mean HH	Total	Units	Mean HH
Steelhead	57.90	42.10	42.10	15.80	15.80	153	5.67	1.42	109 Individual	4.04
Steelhead [Non-Commercial Gear]			10.50			16	0.59	0.15	11 Individual	0.41
Steelhead [Rod and Reel]			31.60			137	5.07	1.27	98 Individual	3.63
Unknown Trout	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Unknown Trout [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Unknown Trout [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
<b>GAME</b>	100.00	63.20	57.90	78.90	68.40	4876	180.59	45.15	97 Individual	3.59
Big Game	100.00	63.20	52.60	78.90	68.40	4845	179.44	44.86	71 Individual	2.63
Brown Bear	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Caribou	5.30	5.30	5.30	0.00	5.30	1066	39.48	9.87	7 Individual	0.26
Deer	100.00	57.90	47.40	78.90	68.40	3779	139.96	34.99	64 Individual	2.37
Elk	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Goat	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Moose	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Reindeer	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Sheep	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Small Game/Furbearer	10.50	10.50	10.50	0.00	0.00	31	1.15	0.29	26 Individual	0.96
Fox	5.30	5.30	5.30	0.00	0.00	0	0.00	0.00	7 Individual	0.26
Red Fox	5.30	5.30	5.30	0.00	0.00	0	0.00	0.00	7 Individual	0.26
Beaver	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Hare	10.50	10.50	10.50	0.00	0.00	31	1.15	0.29	16 Individual	0.59
Land Otter	5.30	5.30	5.30	0.00	0.00	0	0.00	0.00	3 Individual	0.11
Weasel	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
<b>MARINE MAMMALS</b>	84.20	28.30	26.30	57.90	15.80	2748	101.78	25.44	31 Individual	1.15
Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Black Fin Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Seal	84.20	28.30	26.30	57.90	15.80	1539	57.00	14.25	24 Individual	0.89
Harbor Seal	84.20	28.30	26.30	57.90	15.80	1539	57.00	14.25	24 Individual	0.89
Sea Lion	15.80	5.30	5.30	10.50	0.00	1209	44.78	11.19	7 Individual	0.26
Sea Otter		0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
<b>BIRDS AND EGGS</b>	89.50	31.60	31.60	63.20	26.30	309	11.44	2.86	963 Individual	35.67
Upland Game Birds	36.80	10.50	10.50	26.30	15.80	16	0.59	0.15	23 Individual	0.85
Ptarmigan	36.80	10.50	10.50	26.30	15.80	16	0.59	0.15	23 Individual	0.85
Migratory Birds	89.50	26.30	26.30	63.20	26.30	187	6.93	1.73	230 Individual	8.52
Duck	89.50	26.30	26.30	63.20	26.30	187	6.93	1.73	230 Individual	8.52

Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Kariuk, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (9/1) Harvest	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units		Mean HH
Geese	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00	106%
Eggs	10.50	5.30	5.30	5.30	5.30	107	3.96	0.99	711 Individual		26.33	59%
MARINE INVERTEBRATES	84.20	63.20	63.20	47.40	10.50	1351	50.04	12.51	1351 Pounds		50.04	106%
MARINE INVERTEBRATES-Commercial						284	9.78	2.44	284 Pounds		9.78	48%
MARINE INVERTEBRATES-Non Commercial						1087	40.26	10.06	1087 Pounds		40.26	100%
Clams	84.20	63.20	63.20	47.40	10.50	301	11.15	2.79	32 6 Gal Bckt		1.19	100%
Clams-Non Commercial	63.20	15.80	15.80	42.10	0.00	301	11.15	2.79	32 6 Gal Bckt		1.19	100%
Butter Clams	63.20	15.80	15.80	42.10	0.00	281	10.41	2.60	30 6 Gal Bckt		1.11	100%
Butter Clams-Non Commercial	47.40	10.50	10.50	36.80	0.00	281	10.41	2.60	30 6 Gal Bckt		1.11	100%
Razor Clams	47.40	10.50	10.50	36.80	0.00	13	0.48	0.12	1 6 Gal Bckt		0.04	200%
Razor Clams-Non Commercial	10.50	5.30	5.30	5.30	0.00	13	0.48	0.12	1 6 Gal Bckt		0.04	200%
Horse Clams (Gaper)	10.50	5.30	5.30	5.30	0.00	7	0.26	0.06	1 6 Gal Bckt		0.04	100%
Horse Clams (Gaper)-Non Commercial	10.50	5.30	5.30	5.30	0.00	7	0.26	0.06	1 6 Gal Bckt		0.04	100%
Crabs	10.50	5.30	5.30	10.50	0.00	165	6.11	1.53	171 Individual		6.33	106%
Crabs-Commercial						165	6.11	1.53	171 Individual		6.33	106%
Crabs-Non Commercial	10.50	0.00	0.00	10.50	0.00	0	0.00	0.00	0		0.00	
Dungeness Crab	0.00	5.30	5.30	0.00	0.00	99	3.67	0.92	142 Individual		5.26	107%
Dungeness Crab-Commercial						99	3.67	0.92	142 Individual		5.26	107%
Dungeness Crab-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
King Crab	5.30	5.30	5.30	5.30	0.00	65	2.41	0.60	28 Individual		1.04	107%
King Crab-Commercial	5.30	5.30	5.30	5.30	0.00	65	2.41	0.60	28 Individual		1.04	107%
King Crab-Non Commercial	5.30	0.00	0.00	5.30	0.00	0	0.00	0.00	0		0.00	
Tanner Crab	5.30	0.00	0.00	5.30	0.00	0	0.00	0.00	0		0.00	
Tanner Crab-Commercial						0	0.00	0.00	0		0.00	
Tanner Crab-Non Commercial	5.30	0.00	0.00	5.30	0.00	0	0.00	0.00	0		0.00	
Cockles	5.30	5.30	5.30	0.00	0.00	13	0.48	0.12	1 6 Gal Bckt		0.04	200%
Cockles-Non Commercial	5.30	5.30	5.30	0.00	0.00	13	0.48	0.12	1 6 Gal Bckt		0.04	200%
Geoducks	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Geoducks-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Scallops	5.30	5.30	5.30	0.00	0.00	14	0.52	0.13	14 Pounds		0.52	107%
Scallops-Non Commercial	5.30	5.30	5.30	0.00	0.00	14	0.52	0.13	14 Pounds		0.52	107%
Mussels	42.10	31.60	31.60	5.30	5.30	167	6.19	1.55	18 6 Gal Bckt		0.67	50%
Mussels-Non Commercial	42.10	31.60	31.60	5.30	5.30	167	6.19	1.55	18 6 Gal Bckt		0.67	50%
Chitons	84.20	57.90	57.90	21.10	5.30	341	12.63	3.16	36 6 Gal Bckt		1.33	30%
Chitons-Non Commercial	84.20	57.90	57.90	21.10	5.30	341	12.63	3.16	36 6 Gal Bckt		1.33	30%
Bidarkis (large)	84.20	57.90	57.90	21.10	5.30	341	12.63	3.16	36 6 Gal Bckt		1.33	30%
Bidarkis (large)-Non Commercial	84.20	57.90	57.90	21.10	5.30	341	12.63	3.16	36 6 Gal Bckt		1.33	30%
Octopus	42.10	15.80	15.80	21.10	0.00	193	7.15	1.79	48 Individual		1.78	93%

Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Karluk, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Octopus-Non Commercial	42.10	15.80	15.80	21.10	0.00	193	7.15	1.79	48 Individual		1.78	93%
Sea Cucumber	5.30	5.30	5.30	0.00	0.00	4	0.15	0.04	9 Quarts		0.33	100%
Sea Cucumber-Non Commercial	5.30	5.30	5.30	0.00	0.00	4	0.15	0.04	9 Quarts		0.33	100%
Sea Urchin	57.90	42.10	42.10	10.50	5.30	51	1.89	0.47	17 6 Gal Bckt		0.63	29%
Sea Urchin-Non Commercial	57.90	42.10	42.10	10.50	5.30	51	1.89	0.47	17 6 Gal Bckt		0.63	29%
Shrimp	5.30	5.30	5.30	5.30	0.00	99	3.67	0.92	99 Pounds		3.67	107%
Shrimp-Commercial	5.30	5.30	5.30	5.30	0.00	99	3.67	0.92	99 Pounds		3.67	107%
Shrimp-Non Commercial	5.30	0.00	0.00	5.30	0.00	0	0.00	0.00	0		0.00	
Snails	5.30	5.30	5.30	0.00	0.00	2	0.07	0.02	6 Quarts		0.22	100%
Snails-Non Commercial	5.30	5.30	5.30	0.00	0.00	2	0.07	0.02	6 Quarts		0.22	100%
Limpets	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Limpets-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
PLANTS AND BERRIES	89.50	68.40	68.40	47.40	47.40	207	7.67	1.92	207 Pounds		7.67	20%
Berries	89.50	68.40	68.40	47.40	47.40	207	7.67	1.92	207 Quarts		7.67	20%
Plants/Greens/Mushrooms	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Seaweed/Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	

SOURCE: Alaska Dept. of Fish and Game, Division of Subsistence, Household Surveys, 1987.

Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1986

Number of Households Sampled = 37.00  
 Number of Households in Community = 52.00

Estimated Number of People in Community = 170.05

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	
ALL RESOURCES	97.30	83.80	81.10	86.50	59.50	35537	683.40	208.97	35537 Pounds	683.40	25%
FISH	91.90	67.60	67.60	78.40	43.20	23383	449.67	137.50	23383 Pounds	449.67	29%
FISH [Commercial Gear]			27.00		18.90	9919	190.75	58.33	9919 Pounds	190.75	49%
FISH [Non-Commercial Gear]			56.80			10782	207.35	63.40	10782 Pounds	207.35	32%
FISH [Rod and Reel]			29.70			2681	51.56	15.77	2681 Pounds	51.56	32%
SALMON	73.00	56.80	56.80	51.40	35.10	17308	332.85	101.78	3566 Individual	68.58	34%
Salmon [Commercial Gear]			27.00		18.90	9341	179.63	54.93	1844 Individual	35.46	47%
Salmon [Non-Commercial Gear]			40.50			7238	139.19	42.56	1612 Individual	31.00	38%
Salmon [Rod and Reel]			18.90			729	14.02	4.29	110 Individual	2.12	74%
Chum Salmon	13.50	27.00	10.80	10.80	2.70	46	0.88	0.27	8 Individual	0.15	62%
Chum Salmon [Commercial Gear]			2.70		0.00	23	0.44	0.14	4 Individual	0.08	100%
Chum Salmon [Non-Commercial Gear]			8.10			23	0.44	0.14	4 Individual	0.08	75%
Chum Salmon [Rod and Reel]			0.00			0	0.00	0.00	0	0.00	
Coho Salmon	59.50	48.60	48.60	37.80	24.30	5607	107.83	32.97	859 Individual	16.52	30%
Coho Salmon [Commercial Gear]			24.30		8.10	3129	60.17	18.40	479 Individual	9.21	38%
Coho Salmon [Non-Commercial Gear]			24.30			2056	39.54	12.09	315 Individual	6.06	45%
Coho Salmon [Rod and Reel]			13.50			422	8.12	2.48	65 Individual	1.25	75%
Chinook Salmon	32.40	24.30	24.30	21.60	8.10	1347	25.90	7.92	122 Individual	2.35	68%
Chinook Salmon [Commercial Gear]			10.80		5.40	1053	20.25	6.19	96 Individual	1.85	85%
Chinook Salmon [Non-Commercial Gear]			8.10			108	2.08	0.64	10 Individual	0.19	80%
Chinook Salmon [Rod and Reel]			8.10			186	3.58	1.09	17 Individual	0.33	88%
Pink Salmon	35.10	32.40	24.30	27.00	8.10	1264	24.31	7.43	468 Individual	9.00	51%
Pink Salmon [Commercial Gear]			10.80		2.70	493	9.48	2.90	183 Individual	3.52	55%
Pink Salmon [Non-Commercial Gear]			16.20			770	14.81	4.53	285 Individual	5.48	56%
Pink Salmon [Rod and Reel]			2.70			0	0.00	0.00	0	0.00	
Sockeye Salmon	62.20	54.10	51.40	40.50	32.40	9044	173.92	53.18	2108 Individual	40.54	38%
Sockeye Salmon [Commercial Gear]			27.00		18.90	4643	89.29	27.30	1082 Individual	20.81	57%
Sockeye Salmon [Non-Commercial Gear]			32.40			4281	82.33	25.17	998 Individual	19.19	42%
Sockeye Salmon [Rod and Reel]			8.10			121	2.33	0.71	28 Individual	0.54	107%
Salmon Roe	8.10	2.70	2.70	5.40	2.70						
Salmon Roe [Non-Commercial Gear]			2.70								
Salmon Roe [Rod and Reel]			0.00								



Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	Mean HH
Non-Salmon Fish	89.20	54.10	48.60	75.70	27.00	6074	116.81	6074	Pounds	116.81
Non-Salmon [Commercial Gear]			10.80		2.70	578	11.12	578	Pounds	11.12
Non-Salmon [Non-Commercial Gear]			29.70			3544	68.15	3544	Pounds	68.15
Non-Salmon [Rod and Reel]			16.20			1953	37.56	1953	Pounds	37.56
Cod	51.40	21.60	18.90	40.50	10.80	385	7.40	125	Individual	2.40
Cod [Non-Commercial Gear]			16.20			362	6.96	118	Individual	2.27
Cod [Rod and Reel]			2.70			22	0.42	7	Individual	0.13
Tom Cod	2.70	2.70	2.70	2.70	0.00	3	0.06	6	Individual	0.12
Tom Cod [Non-Commercial Gear]			2.70			3	0.06	6	Individual	0.12
Tom Cod [Rod and Reel]			0.00			0	0.00	0		0.00
Unknown Cod	51.40	21.60	18.90	40.50	10.80	382	7.35	119	Individual	2.29
Unknown Cod [Non-Commercial Gear]			16.20			360	6.92	112	Individual	2.15
Unknown Cod [Rod and Reel]			2.70			22	0.42	7	Individual	0.13
Flounder	2.70	2.70	0.00	2.70	0.00	0	0.00	0		0.00
Flounder [Non-Commercial Gear]			0.00			0	0.00	0		0.00
Flounder [Rod and Reel]			0.00			0	0.00	0		0.00
Sole	2.70	0.00	0.00	2.70	0.00	0	0.00	0		0.00
Sole [Non-Commercial Gear]			0.00			0	0.00	0		0.00
Sole [Rod and Reel]			0.00			0	0.00	0		0.00
Halibut	81.10	40.50	32.40	67.60	18.90	4652	89.46	4652	Pounds	89.46
Halibut [Commercial Gear]			8.10		2.70	527	10.13	527	Pounds	10.13
Halibut [Non-Commercial Gear]			8.10			2466	47.42	76	Individual	1.46
Halibut [Rod and Reel]			2.70			1658	31.88	63	Individual	1.21
Herring	27.00	16.20	10.80	21.60	5.40	420	8.08	12	6 Gal Bckt	0.23
Herring [Commercial Gear]			2.70		0.00	50	0.96	1	6 Gal Bckt	0.02
Herring [Non-Commercial Gear]			8.10			369	7.10	10	6 Gal Bckt	0.19
Herring [Rod and Reel]			0.00			0	0.00	0		0.00
Roe on Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0		0.00
Roe on Kelp [Non-Commercial Gear]			0.00			0	0.00	0		0.00
Roe on Kelp [Rod and Reel]			0.00			0	0.00	0		0.00
Rockfish	21.60	10.80	10.80	13.50	5.40	171	3.29	65	Individual	1.25
Rockfish [Non-Commercial Gear]			8.10			139	2.67	44	Individual	0.85
Rockfish [Rod and Reel]			5.40			32	0.62	21	Individual	0.40
Red Rockfish	16.20	8.10	8.10	10.80	5.40	118	2.27	30	Individual	0.58
Red Rockfish [Non-Commercial Gear]			8.10			118	2.27	30	Individual	0.58
Red Rockfish [Rod and Reel]			0.00			0	0.00	0		0.00

Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		85% Conf. Limit (+/-)
	Use	Att	Harv	Recv	Total	Mean HH	Percapita	Total	Units	Mean HH
Sea Bass	13.50	8.10	5.40	10.80	42	0.81	0.25	28 Individual	0.54	75%
Sea Bass [Non-Commercial Gear]			2.70		21	0.40	0.12	14 Individual	0.27	107%
Sea Bass [Rod and Reel]			2.70		21	0.40	0.12	14 Individual	0.27	107%
Unknown Rockfish	2.70	2.70	2.70	0.00	10	0.19	0.06	7 Individual	0.13	100%
Unknown Rockfish [Non-Commercial Gear]			0.00		0	0.00	0.00	0	0.00	
Unknown Rockfish [Rod and Reel]			2.70		10	0.19	0.06	7 Individual	0.13	100%
Irish Lord	5.40	0.00	0.00	5.40	0	0.00	0.00	0	0.00	
Irish Lord [Non-Commercial Gear]			0.00		0	0.00	0.00	0	0.00	
Irish Lord [Rod and Reel]			0.00		0	0.00	0.00	0	0.00	
Eel	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Eel [Non-Commercial Gear]			0.00		0	0.00	0.00	0	0.00	
Eel [Rod and Reel]			0.00		0	0.00	0.00	0	0.00	
Shark	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Shark [Non-Commercial Gear]			0.00		0	0.00	0.00	0	0.00	
Shark [Rod and Reel]			0.00		0	0.00	0.00	0	0.00	
Pollock	2.70	2.70	2.70	0.00	20	0.38	0.12	14 Individual	0.27	107%
Pollock [Non-Commercial Gear]			2.70		20	0.38	0.12	14 Individual	0.27	107%
Pollock [Rod and Reel]			0.00		0	0.00	0.00	0	0.00	
Trout and Char	78.40	35.10	35.10	62.20	427	8.21	2.51	305 Individual	5.87	32%
Trout and Char [Non-Commercial Gear]			18.90		187	3.60	1.10	134 Individual	2.58	47%
Trout and Char [Rod and Reel]			16.20		240	4.62	1.41	171 Individual	3.29	49%
Char	29.70	16.20	16.20	16.20	96	1.85	0.56	69 Individual	1.33	50%
Char [Non-Commercial Gear]			8.10		33	0.63	0.19	24 Individual	0.46	58%
Char [Rod and Reel]			8.10		63	1.21	0.37	45 Individual	0.87	73%
Dolly Varden	29.70	16.20	16.20	16.20	96	1.85	0.56	69 Individual	1.33	50%
Dolly Varden [Non-Commercial Gear]			4.10		33	0.63	0.19	24 Individual	0.46	41%
Dolly Varden [Rod and Reel]			4.10		63	1.21	0.37	45 Individual	0.87	51%
Trout	75.70	32.40	32.40	62.20	331	6.37	1.95	236 Individual	4.54	36%
Trout [Non-Commercial Gear]			16.20		153	2.94	0.90	110 Individual	2.12	53%
Trout [Rod and Reel]			16.20		177	3.40	1.04	126 Individual	2.42	56%
Lake Trout	5.40	2.70	2.70	2.70	30	0.58	0.18	21 Individual	0.40	104%
Lake Trout [Non-Commercial Gear]			2.70		30	0.58	0.18	21 Individual	0.40	104%
Lake Trout [Rod and Reel]			0.00		0	0.00	0.00	0	0.00	
Rainbow Trout	16.20	10.80	8.10	5.40	57	1.10	0.34	41 Individual	0.79	65%
Rainbow Trout [Non-Commercial Gear]			2.70		20	0.38	0.12	14 Individual	0.27	107%
Rainbow Trout [Rod and Reel]			5.40		37	0.71	0.22	27 Individual	0.52	85%

Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (%) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	Mean HH
Steelhead	75.70	27.00	27.00	62.20	13.50	146	2.81	0.86	104 Individual	2.00
Steelhead [Non-Commercial Gear]			13.50			65	1.25	0.38	46 Individual	0.88
Steelhead [Rod and Reel]			13.50			81	1.56	0.48	58 Individual	1.12
Unknown Trout	10.80	8.10	8.10	5.40	0.00	98	1.88	0.58	70 Individual	1.35
Unknown Trout [Non-Commercial Gear]			5.40			40	0.77	0.24	28 Individual	0.54
Unknown Trout [Rod and Reel]			2.70			59	1.13	0.35	42 Individual	0.81
GAME	86.50	51.40	45.90	64.90	27.00	6723	129.29	39.53	168 Individual	3.23
Big Game	86.50	51.40	45.90	62.20	27.00	6802	126.96	38.82	102 Individual	1.96
Brown Bear	5.40	0.00	0.00	5.40	0.00	0	0.00	0.00	0	0.00
Caribou	2.70	2.70	2.70	2.70	2.70	106	2.04	0.62	1 Individual	0.02
Deer	83.80	51.40	45.90	56.80	24.30	5864	112.77	34.48	98 Individual	1.88
Elk	24.30	8.10	8.10	21.60	5.40	632	12.15	3.72	3 Individual	0.06
Goat	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Moose	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Reindeer	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Sheep	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Small Game/Furbearer	24.30	16.20	16.20	10.80	2.70	121	2.33	0.71	66 Individual	1.27
Fox	2.70	2.70	2.70	0.00	0.00	0	0.00	0.00	3 Individual	0.06
Red Fox	2.70	2.70	2.70	0.00	0.00	0	0.00	0.00	3 Individual	0.06
Beaver	2.70	2.70	2.70	0.00	0.00	0	0.00	0.00	1 Individual	0.02
Hare	24.30	16.20	16.20	10.80	2.70	121	2.33	0.71	60 Individual	1.15
Land Otter	2.70	2.70	2.70	0.00	0.00	0	0.00	0.00	1 Individual	0.02
Weasel	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
MARINE MAMMALS	24.30	10.80	10.80	21.60	2.70	565	10.87	3.32	34 Individual	0.65
Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Black Fin Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Seal	24.30	8.10	8.10	21.60	2.70	565	10.87	3.32	10 Individual	0.19
Harbor Seal	24.30	8.10	8.10	21.60	2.70	565	10.87	3.32	10 Individual	0.18
Sea Lion	5.40	0.00	0.00	5.40	0.00	0	0.00	0.00	0	0.00
Sea Otter	5.40	5.40	5.40	0.00	0.00	0	0.00	0.00	24 Individual	0.46
BIRDS AND EGGS	48.60	27.00	24.30	32.40	10.80	157	3.02	0.92	263 Individual	5.06
Upland Game Birds	13.50	5.40	5.40	8.10	0.00	11	0.21	0.06	15 Individual	0.29
Phalarope	13.50	5.40	5.40	8.10	0.00	11	0.21	0.06	15 Individual	0.29

ished Harvest and Use Resources and Households 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Migratory Birds	40.50	21.60	18.90	27.00	5.40	133	2.56	0.78	164 Individual	3.15	41%
Ducks	40.50	21.60	18.90	27.00	5.40	133	2.56	0.78	164 Individual	3.15	41%
Geese	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Eggs	29.70	10.80	10.80	18.90	5.40	12	0.23	0.07	83 Individual	1.60	61%
MARINE INVERTEBRATES	89.20	64.90	59.50	70.30	48.60	4097	78.79	24.09	4096 Pounds	78.77	27%
MARINE INVERTEBRATES-Commercial						445	8.56	2.62	445 Pounds	8.56	81%
MARINE INVERTEBRATES-Non Commercial						3651	70.21	21.47	3651 Pounds	70.21	24%
Clams	78.40	48.60	48.60	45.90	32.40	2034	39.12	11.96	216 6 Gal Bckt	4.15	25%
Clams-Non Commercial	78.40	48.60	48.60	45.90	32.40	2034	39.12	11.96	216 6 Gal Bckt	4.15	25%
Butter Clams	78.40	48.60	48.60	43.20	32.40	1801	34.63	10.59	192 6 Gal Bckt	3.69	23%
Butter Clams-Non Commercial	78.40	48.60	48.60	43.20	32.40	1801	34.63	10.59	192 6 Gal Bckt	3.69	23%
Razor Clams	10.80	2.70	2.70	8.10	2.70	220	4.23	1.29	23 6 Gal Bckt	0.44	108%
Razor Clams-Non Commercial	10.80	2.70	2.70	8.10	2.70	220	4.23	1.29	23 6 Gal Bckt	0.44	108%
Horse Clams (Gaper)	2.70	2.70	2.70	0.00	0.00	13	0.25	0.08	1 6 Gal Bckt	0.02	100%
Horse Clams (Gaper)-Non Commercial	2.70	2.70	2.70	0.00	0.00	13	0.25	0.08	1 6 Gal Bckt	0.02	100%
Crabs	62.20	29.70	24.30	51.40	10.80	1093	21.02	6.43	869 Individual	16.71	56%
Crabs-Commercial						445	8.56	2.62	284 Individual	5.46	80%
Crabs-Non Commercial	62.20	18.90	18.90	51.40	8.10	648	12.46	3.81	585 Individual	11.25	60%
Dungeness Crab	40.50	16.20	13.50	32.40	8.10	253	4.87	1.49	361 Individual	6.94	82%
Dungeness Crab-Commercial						15	0.29	0.09	21 Individual	0.40	104%
Dungeness Crab-Non Commercial	40.50	10.80	10.80	32.40	8.10	238	4.58	1.40	340 Individual	6.54	87%
King Crab	27.00	16.20	13.50	21.60	0.00	94	1.81	0.55	41 Individual	0.79	53%
King Crab-Commercial						32	0.62	0.19	14 Individual	0.27	107%
King Crab-Non Commercial	27.00	10.80	10.80	21.60	0.00	61	1.17	0.36	27 Individual	0.52	62%
Tanner Crab	51.40	24.30	18.90	40.50	8.10	747	14.37	4.39	467 Individual	8.98	79%
Tanner Crab-Commercial						398	7.65	2.34	249 Individual	4.79	89%
Tanner Crab-Non Commercial	51.40	13.50	13.50	40.50	5.40	348	6.69	2.05	218 Individual	4.19	72%
Cockles	5.40	5.40	5.40	0.00	0.00	66	1.27	0.39	7 6 Gal Bckt	0.13	85%
Cockles-Non Commercial	5.40	5.40	5.40	0.00	0.00	66	1.27	0.39	7 6 Gal Bckt	0.13	85%
Geoducks	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Geoducks-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Scallops	16.20	5.40	2.70	13.50	2.70	28	0.54	0.16	28 Pounds	0.54	107%
Scallops-Non Commercial	16.20	5.40	2.70	13.50	2.70	28	0.54	0.16	28 Pounds	0.54	107%
Mussels	16.20	10.80	10.80	5.40	2.70	40	0.77	0.24	4 6 Gal Bckt	0.08	50%
Mussels-Non Commercial	16.20	10.80	10.80	5.40	2.70	40	0.77	0.24	4 6 Gal Bckt	0.08	50%

Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1986

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	Mean HH	Harvest
Chitons	37.80	24.30	24.30	16.20	8.10	93	1.79	0.55	10 6 Gal Bckt	0.19	39%
Chitons-Non Commercial	37.80	24.30	24.30	16.20	8.10	93	1.79	0.55	10 6 Gal Bckt	0.19	39%
Bidarkis (large)	37.80	24.30	24.30	16.20	8.10	93	1.79	0.55	10 6 Gal Bckt	0.19	39%
Bidarkis (large)-Non Commercial	37.80	24.30	24.30	16.20	8.10	93	1.79	0.55	10 6 Gal Bckt	0.19	39%
Octopus	70.30	43.20	43.20	40.50	18.90	568	10.92	3.34	142 Individual	2.73	30%
Octopus-Non Commercial	70.30	43.20	43.20	40.50	18.90	568	10.92	3.34	142 Individual	2.73	30%
Sea Cucumber	5.40	2.70	2.70	2.70	2.70	0	0.00	0.00	0	0.00	
Sea Cucumber-Non Commercial	5.40	2.70	2.70	2.70	2.70	0	0.00	0.00	0	0.00	
Sea Urchin	32.40	18.90	18.90	10.80	10.80	82	1.58	0.48	27 6 Gal Bckt	0.52	59%
Sea Urchin-Non Commercial	32.40	18.90	18.90	10.80	10.80	82	1.58	0.48	27 6 Gal Bckt	0.52	59%
Shrimp	27.00	8.10	5.40	21.60	2.70	77	1.48	0.45	77 Pounds	1.48	96%
Shrimp-Commercial	27.00	2.70	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Shrimp-Non Commercial	27.00	5.40	5.40	21.60	2.70	77	1.48	0.45	77 Pounds	1.48	96%
Snails	8.10	8.10	8.10	0.00	2.70	14	0.27	0.08	35 Quarts	0.67	85%
Snails-Non Commercial	8.10	8.10	8.10	0.00	2.70	14	0.27	0.08	35 Quarts	0.67	85%
Limpets	2.70	2.70	2.70	0.00	0.00	1	0.02	0.01	3 Quarts	0.06	100%
Limpets-Non Commercial	2.70	2.70	2.70	0.00	0.00	1	0.02	0.01	3 Quarts	0.06	100%
PLANTS AND BERRIES	59.50	54.10	54.10	24.30	32.40	614	11.81	3.61	614 Pounds	11.81	37%
Berries	59.50	54.10	54.10	21.60	29.70	375	7.21	2.21	375 Quarts	7.21	24%
Plants/Greens/Mushrooms	16.20	13.50	13.50	8.10	5.40	239	4.60	1.41	239 Quarts	4.60	69%
Seaweed/Kelp	2.70	2.70	2.70	2.70	2.70	0	0.00	0.00	0	0.00	

SOURCE: Alaska Dept. of Fish and Game, Division of Subsistence, Household Surveys, 1987.

Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1986

Number of Households Sampled =  
Number of Households in Community =

Estimated Number of People in Community = 378.63

44.00  
119.00

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
ALL RESOURCES	100.00	97.70	97.70	84.10	79.50	160255	1346.68	423.24	60255 Pounds		1346.68	30%
FISH	93.20	93.20	88.60	68.20	59.10	86599	727.72	228.71	86599 Pounds		727.72	43%
FISH [Commercial Gear]			47.70		20.50	45606	383.24	120.45	45606 Pounds		383.24	54%
FISH [Non-Commercial Gear]			56.80			24544	206.25	64.82	24544 Pounds		206.25	78%
FISH [Rod and Reel]			77.30			16449	138.23	43.44	16449 Pounds		138.23	54%
SALMON	93.20	93.20	88.60	52.30	45.50	70957	596.28	187.40	14210 Individual		119.41	45%
Salmon [Commercial Gear]			45.50		13.60	41306	347.11	109.09	8441 Individual		70.93	57%
Salmon [Non-Commercial Gear]			56.80			21877	183.84	57.78	4311 Individual		36.23	80%
Salmon [Rod and Reel]			63.60			7774	65.33	20.53	1458 Individual		12.25	56%
Chum Salmon	63.60	68.20	65.90	29.50	25.00	16733	140.61	44.19	3053 Individual		25.66	46%
Chum Salmon [Commercial Gear]			36.40		6.80	9915	83.32	26.19	1809 Individual		15.20	65%
Chum Salmon [Non-Commercial Gear]			31.80			4609	38.73	12.17	841 Individual		7.07	91%
Chum Salmon [Rod and Reel]			36.40			2209	18.56	5.83	403 Individual		3.39	55%
Coho Salmon	84.10	84.10	81.80	43.20	36.40	32072	269.51	84.70	4911 Individual		41.27	41%
Coho Salmon [Commercial Gear]			43.20		6.80	15524	130.45	41.00	2377 Individual		19.97	47%
Coho Salmon [Non-Commercial Gear]			45.50			12133	101.96	32.04	1858 Individual		15.61	83%
Coho Salmon [Rod and Reel]			56.80			4415	37.10	11.66	676 Individual		5.68	69%
Chinook Salmon	2.30	4.50	4.50	2.30	2.30	1490	12.52	3.94	135 Individual		1.13	155%
Chinook Salmon [Commercial Gear]			2.30		0.00	1490	12.52	3.94	135 Individual		1.13	155%
Chinook Salmon [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Chinook Salmon [Rod and Reel]			2.30			0	0.00	0.00	0		0.00	
Pink Salmon	72.70	79.50	77.30	36.40	36.40	9420	79.16	24.88	3489 Individual		29.32	44%
Pink Salmon [Commercial Gear]			38.60		9.10	5593	47.00	14.77	2072 Individual		17.41	53%
Pink Salmon [Non-Commercial Gear]			45.50			3023	25.40	7.98	1120 Individual		9.41	90%
Pink Salmon [Rod and Reel]			45.50			803	6.75	2.12	298 Individual		2.50	59%
Sockeye Salmon	45.50	63.60	47.70	25.00	22.70	11243	94.48	29.69	2621 Individual		22.03	97%
Sockeye Salmon [Commercial Gear]			34.10		11.40	8783	73.81	23.20	2047 Individual		17.20	102%
Sockeye Salmon [Non-Commercial Gear]			25.00			2112	17.75	5.58	492 Individual		4.13	105%
Sockeye Salmon [Rod and Reel]			11.40			349	2.93	0.92	81 Individual		0.68	155%
Salmon Roe	34.10	25.00	18.20	15.90	4.50							
Salmon Roe [Non-Commercial Gear]			18.20									
Salmon Roe [Rod and Reel]			0.00									

Resource Name	Use	Att	Harv	Recv	Give	Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
						Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Non-Salmon Fish	.50	65.90	.40	.40	40.90	15841	131.44	11.36	15841 Pounds		131.44	64%
Non-Salmon [Commercial Gear]			22.70		11.40	4301	36.14	11.36	4300 Pounds		36.13	63%
Non-Salmon [Non-Commercial Gear]			9.10			2667	22.41	7.04	2667 Pounds		22.41	147%
Non-Salmon [Rod and Reel]			40.90			8675	72.90	22.91	8675 Pounds		72.90	60%
Cod	47.70	8.20	18.20	34.10	13.60	506	4.25	1.34	238 Individual		2.00	95%
Cod [Non-Commercial Gear]			2.30			0	0.00	0.00	0		0.00	
Cod [Rod and Reel]			15.90			506	4.25	1.34	238 Individual		2.00	95%
Tom Cod	6.80	6.80	6.80	2.30	6.80	48	0.40	0.13	95 Individual		0.80	134%
Tom Cod [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Tom Cod [Rod and Reel]			6.80			48	0.40	0.13	95 Individual		0.80	134%
Unknown Cod	47.70	8.20	18.20	34.10	11.40	458	3.85	1.21	143 Individual		1.20	83%
Unknown Cod [Non-Commercial Gear]			2.30			0	0.00	0.00	0		0.00	
Unknown Cod [Rod and Reel]			15.90			458	3.85	1.21	143 Individual		1.20	83%
Flounder	2.30	2.4	2.30	0.00	0.00	162	1.36	0.43	54 Individual		0.45	155%
Flounder [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Flounder [Rod and Reel]			2.30			162	1.36	0.43	54 Individual		0.45	155%
Sole	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sole [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Sole [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Halibut	75.00	56.80	54.50	56.80	38.60	12056	101.31	31.84	12056 Pounds		101.31	49%
Halibut [Commercial Gear]			22.70		11.40	4301	36.14	11.36	4300 Pounds		36.13	63%
Halibut [Non-Commercial Gear]			2.30			136	1.14	0.36	14 Individual		0.12	150%
Halibut [Rod and Reel]			29.50			7620	64.03	20.12	275 Individual		2.31	52%
Herring	4.50	13.60	2.30	2.30	0.00	2531	21.27	6.68	70 6 Gal Bcld		0.59	155%
Herring [Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Herring [Non-Commercial Gear]			2.30			2531	21.27	6.68	70 6 Gal Bcld		0.59	155%
Herring [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Roe on Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Roe on Kelp [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Roe on Kelp [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Rockfish	11.40	2.4	2.30	9.10	4.50	189	1.59	0.50	81 Individual		0.68	155%
Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Rockfish [Rod and Reel]			2.30			189	1.59	0.50	81 Individual		0.68	155%
Red Rockfish	4.50	2.4	2.30	2.30	2.30	108	0.91	0.29	27 Individual		0.23	155%
Red Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Red Rockfish [Rod and Reel]			2.30			108	0.91	0.29	27 Individual		0.23	155%
Sea Bass	9.10	2.4	2.30	6.80	2.30	81	0.68	0.21	54 Individual		0.45	155%
Sea Bass [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Sea Bass [Rod and Reel]			2.30			81	0.68	0.21	54 Individual		0.45	155%
Unknown Rockfish	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Unknown Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	

Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
Unknown Rockfish [Rod and Reel]												
Irish Lord			0.00				0	0.00	0	0	0.00	
Irish Lord [Non-Commercial Gear]	0.00	0.00	0.00	0.00	0.00		0	0.00	0	0	0.00	
Irish Lord [Rod and Reel]			0.00				0	0.00	0	0	0.00	
Eel			0.00				0	0.00	0	0	0.00	
Eel [Non-Commercial Gear]	0.00	0.00	0.00	0.00	0.00		0	0.00	0	0	0.00	
Eel [Rod and Reel]			0.00				0	0.00	0	0	0.00	
Shark			0.00				0	0.00	0	0	0.00	
Shark [Non-Commercial Gear]	0.00	0.00	0.00	0.00	0.00		0	0.00	0	0	0.00	
Shark [Rod and Reel]			0.00				0	0.00	0	0	0.00	
Pollock			0.00				0	0.00	0	0	0.00	
Pollock [Non-Commercial Gear]	9.10	2.30	0.00	9.10	2.30		0	0.00	0	0	0.00	
Pollock [Rod and Reel]			0.00				0	0.00	0	0	0.00	
Trout and Char	27.30	18.20	18.20	18.20	9.10	196	1.65	0.52	141 Individual	141 Individual	1.18	75%
Trout and Char [Non-Commercial Gear]			2.30				0	0.00	0	0	0.00	
Trout and Char [Rod and Reel]	25.00	15.90	15.90	18.20	6.80	196	1.65	0.52	141 Individual	141 Individual	1.18	75%
Char			2.30				0	0.00	0	0	0.00	
Char [Non-Commercial Gear]			2.30				0	0.00	0	0	0.00	
Char [Rod and Reel]	25.00	15.90	15.90	18.20	6.80	151	1.27	0.40	108 Individual	108 Individual	0.91	89%
Dolly Varden			1.10				0	0.00	0	0	0.00	
Dolly Varden [Non-Commercial Gear]			6.80				0	0.00	0	0	0.00	
Dolly Varden [Rod and Reel]	4.50	4.50	4.50	0.00	2.30	45	0.38	0.12	32 Individual	32 Individual	0.27	63%
Trout			0.00				0	0.00	0	0	0.00	
Trout [Non-Commercial Gear]			4.50				0	0.00	0	0	0.00	
Trout [Rod and Reel]	0.00	0.00	0.00	0.00	0.00	45	0.38	0.12	32 Individual	32 Individual	0.27	134%
Lake Trout			0.00				0	0.00	0	0	0.00	
Lake Trout [Non-Commercial Gear]			0.00				0	0.00	0	0	0.00	
Lake Trout [Rod and Reel]			0.00				0	0.00	0	0	0.00	
Rainbow Trout			0.00				0	0.00	0	0	0.00	
Rainbow Trout [Non-Commercial Gear]	4.50	4.50	4.50	0.00	2.30	45	0.38	0.12	32 Individual	32 Individual	0.27	134%
Rainbow Trout [Rod and Reel]			4.50				0	0.00	0	0	0.00	
Steelhead			0.00				0	0.00	0	0	0.00	
Steelhead [Non-Commercial Gear]			0.00				0	0.00	0	0	0.00	
Steelhead [Rod and Reel]			0.00				0	0.00	0	0	0.00	
Unknown Trout	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0	0.00	
Unknown Trout [Non-Commercial Gear]			0.00				0	0.00	0	0	0.00	
Unknown Trout [Rod and Reel]			0.00				0	0.00	0	0	0.00	
GAME	95.50	75.00	75.00	68.20	52.30	22691	190.68	59.93	498 Individual	498 Individual	4.16	28%
Big Game	95.50	75.00	75.00	68.20	52.30	22572	189.68	59.61	362 Individual	362 Individual	3.04	22%
Brown Bear	11.40	4.50	4.50	9.10	4.50	2029	17.05	5.36	5 Individual	5 Individual	0.04	120%



Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Cont. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Deer	95.50	72.70	72.70	65.90	50.00	19130	60.76	50.52	349	Individual	2.93	22%
Elk	9.10	4.50	4.50	4.50	0.00	1217	10.23	3.21	5	Individual	0.04	120%
Goat	4.50	2.30	2.30	2.30	0.00	196	1.65	0.52	3	Individual	0.03	133%
Moose	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Reindeer	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sheep	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Small Game/Furbearer	18.20	18.20	13.60	9.10	4.50	119	1.00	0.31	135	Individual	1.13	74%
Fox	4.50	4.50	4.50	0.00	2.30	0	0.00	0.00	46	Individual	0.39	117%
Red Fox	4.50	4.50	4.50	0.00	2.30	0	0.00	0.00	46	Individual	0.39	117%
Beaver	4.50	4.50	4.50	0.00	2.30	0	0.00	0.00	11	Individual	0.09	118%
Hare	11.40	11.40	6.80	9.10	2.30	119	1.00	0.31	60	Individual	0.50	96%
Land Otter	4.50	4.50	4.50	0.00	0.00	0	0.00	0.00	19	Individual	0.16	110%
Weasel	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
MARINE MAMMALS	81.80	47.70	47.70	59.10	50.00	40258	11.17	3.51	300	Individual	2.52	38%
Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Black Fin Whale	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Seal	70.50	38.60	36.40	59.10	38.60	8019	67.39	21.18	127	Individual	1.07	37%
Harbor Seal	70.50	38.60	36.40	59.10	38.60	8019	67.39	21.18	127	Individual	1.07	37%
Sea Lion	79.50	45.50	43.20	56.80	43.20	32238	270.91	85.14	173	Individual	1.45	42%
Sea Otter	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
BIRDS AND EGGS	84.10	65.90	65.90	50.00	29.50	1329	11.17	3.51	2456	Individual	20.64	34%
Upland Game Birds	2.30	2.30	2.30	0.00	0.00	48	0.40	0.13	68	Individual	0.57	154%
Parmigan	2.30	2.30	2.30	0.00	0.00	48	0.40	0.13	68	Individual	0.57	154%
Migratory Birds	81.80	52.30	52.30	47.70	25.00	1126	9.46	2.97	1347	Individual	11.32	40%
Ducks	81.80	52.30	52.30	47.70	25.00	1069	8.98	2.82	1320	Individual	11.09	38%
Geese	2.30	2.30	2.30	0.00	0.00	57	0.48	0.15	27	Individual	0.23	155%
Eggs	29.50	27.30	27.30	15.90	11.40	156	1.31	0.41	1041	Individual	8.75	51%
MARINE INVERTEBRATES	88.60	84.10	84.10	61.40	47.70	8830	74.20	23.32	8830	Pounds	74.20	34%
MARINE INVERTEBRATES-Commercial	88.60	84.10	84.10	61.40	47.70	1060	8.91	2.80	1060	Pounds	8.91	100%
MARINE INVERTEBRATES-Non Commercial	88.60	84.10	84.10	61.40	47.70	7770	65.29	20.52	7770	Pounds	65.29	37%
Clams	81.80	79.50	79.50	38.60	38.60	5456	45.85	14.41	580	6 Gal Bckt	4.87	48%
Clams-Non Commercial	81.80	79.50	79.50	38.60	38.60	5456	45.85	14.41	580	6 Gal Bckt	4.87	48%
Butter Clams	81.80	79.50	79.50	38.60	38.60	5342	44.89	14.11	568	6 Gal Bckt	4.77	49%
Butter Clams-Non Commercial	81.80	79.50	79.50	38.60	38.60	5342	44.89	14.11	568	6 Gal Bckt	4.77	49%
Razor Clams	9.10	6.80	6.80	0.00	2.30	114	0.96	0.30	12	6 Gal Bckt	0.10	108%
Razor Clams-Non Commercial	9.10	6.80	6.80	0.00	2.30	114	0.96	0.30	12	6 Gal Bckt	0.10	108%
Horse Clams (Gaper)	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Horse Clams (Gaper)-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Crabs	45.50	22.70	22.70	34.10	15.90	1779	14.95	4.70	1301	Individual	10.93	64%
Crabs-Commercial	45.50	22.70	22.70	34.10	15.90	1060	8.91	2.80	663	Individual	5.57	100%
Crabs-Non Commercial	45.50	22.70	22.70	34.10	15.90	719	6.04	1.90	638	Individual	5.36	83%

Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1986

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
Dungeness Crab	18.20	9.10	9.10	9.10	6.80	303	2.55	0.80	433	Individual	3.64	102%
Dungeness Crab-Commercial		0.00	0.00		0.00	0	0.00	0.00	0		0.00	
Dungeness Crab-Non Commercial	18.20	9.10	9.10	9.10	6.80	303	2.55	0.80	433	Individual	3.64	102%
King Crab	20.50	6.80	6.80	11.40	6.80	286	2.40	0.76	124	Individual	1.04	108%
King Crab-Commercial		0.00	0.00		0.00	0	0.00	0.00	0		0.00	
King Crab-Non Commercial	20.50	6.80	6.80	11.40	6.80	286	2.40	0.76	124	Individual	1.04	108%
Tanner Crab	34.10	13.60	13.60	29.50	4.50	1190	10.00	3.14	744	Individual	6.25	89%
Tanner Crab-Commercial		9.10	9.10		2.30	1060	8.91	2.80	663	Individual	5.57	100%
Tanner Crab-Non Commercial	34.10	4.50	4.50	29.50	2.30	130	1.09	0.34	81	Individual	0.68	114%
Cockles	22.70	18.20	18.20	9.10	4.50	192	1.61	0.51	20	6 Gal Bckt	0.17	60%
Cockles-Non Commercial	22.70	18.20	18.20	9.10	4.50	192	1.61	0.51	20	6 Gal Bckt	0.17	60%
Geoducks	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Geoducks-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Scallops	2.30	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Scallops-Non Commercial	2.30	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Mussels	4.50	4.50	4.50	0.00	2.30	29	0.24	0.08	3	6 Gal Bckt	0.03	133%
Mussels-Non Commercial	4.50	4.50	4.50	0.00	2.30	29	0.24	0.08	3	6 Gal Bckt	0.03	133%
Chitons	65.90	61.40	61.40	29.50	36.40	727	6.11	1.92	77	6 Gal Bckt	0.65	57%
Chitons-Non Commercial	65.90	61.40	61.40	29.50	36.40	727	6.11	1.92	77	6 Gal Bckt	0.65	57%
Bidarkis (large)	65.90	61.40	61.40	29.50	36.40	727	6.11	1.92	77	6 Gal Bckt	0.65	57%
Bidarkis (large)-Non Commercial	65.90	61.40	61.40	29.50	36.40	727	6.11	1.92	77	6 Gal Bckt	0.65	57%
Octopus	43.20	15.90	15.90	31.80	11.40	281	2.36	0.74	70	Individual	0.59	64%
Octopus-Non Commercial	43.20	15.90	15.90	31.80	11.40	281	2.36	0.74	70	Individual	0.59	64%
Sea Cucumber	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sea Cucumber-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sea Urchin	54.50	47.70	45.50	27.30	29.50	367	3.08	0.97	122	6 Gal Bckt	1.03	44%
Sea Urchin-Non Commercial	54.50	47.70	45.50	27.30	29.50	367	3.08	0.97	122	6 Gal Bckt	1.03	44%
Shrimp	4.50	0.00	0.00	2.30	0.00	0	0.00	0.00	0		0.00	
Shrimp-Commercial		0.00	0.00		0.00	0	0.00	0.00	0		0.00	
Shrimp-Non Commercial	4.50	0.00	0.00	2.30	0.00	0	0.00	0.00	0		0.00	
Snails	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Snails-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Limpets	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Limpets-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
PLANTS AND BERRIES	52.30	50.00	50.00	9.10	11.40	547	4.60	1.44	548	Pounds	4.61	66%
Berries	47.70	45.50	45.50	9.10	9.10	472	3.97	1.25	472	Quarts	3.97	72%
Plants/Greens/Mushrooms	6.80	6.80	6.80	0.00	2.30	76	0.64	0.20	76	Quarts	0.64	114%
Seaweed/Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	

SOURCE: Alaska Dept. of Fish and Game, Division of Subsistence, Household Surveys, 1987.

Table 7. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzi 1986.

Number of Households Sampled = 34.00 Estimated Number of People in Community = 195.12  
 Number of Households in Community = 62.00

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	
ALL RESOURCES	94.10	91.20	91.20	79.40	47.10	78595	1267.66	402.81	78595 Pounds	1267.66	24%
FISH	91.20	79.40	76.50	67.60	44.10	50944	821.68	261.09	50944 Pounds	821.68	25%
FISH [Commercial Gear]			41.20		14.70	13061	210.66	66.94	13061 Pounds	210.66	45%
FISH [Non-Commercial Gear]			64.70			28084	452.97	143.93	28084 Pounds	452.97	30%
FISH [Rod and Reel]			61.80			9799	158.05	50.22	9799 Pounds	158.05	34%
SALMON	85.30	73.50	73.50	52.90	32.40	37591	606.31	192.66	7548 Individual	121.74	26%
Salmon [Commercial Gear]			35.30		14.70	11285	182.02	57.84	2287 Individual	36.89	42%
Salmon [Non-Commercial Gear]			55.90			22023	355.21	112.87	4449 Individual	71.76	33%
Salmon [Rod and Reel]			44.10			4283	69.08	21.95	811 Individual	13.08	51%
Chum Salmon			52.90	20.60	17.60	5466	88.16	28.01	997 Individual	16.08	39%
Chum Salmon [Commercial Gear]	52.90	55.90	29.40		11.80	3587	57.85	18.38	655 Individual	10.56	52%
Chum Salmon [Non-Commercial Gear]			29.40			1799	29.02	9.22	328 Individual	5.29	47%
Chum Salmon [Rod and Reel]			14.70			80	1.29	0.41	15 Individual	0.24	86%
Coho Salmon	79.40	70.60	67.60	41.20	26.50	17194	277.32	88.12	2633 Individual	42.47	28%
Coho Salmon [Commercial Gear]			26.50		8.80	4049	65.31	20.75	620 Individual	10.00	48%
Coho Salmon [Non-Commercial Gear]			50.00			9753	157.31	49.99	1493 Individual	24.08	39%
Coho Salmon [Rod and Reel]			35.30			3394	54.74	17.39	520 Individual	8.39	53%
Chinook Salmon	17.60	20.60	17.60	2.90	2.90	161	2.60	0.83	15 Individual	0.24	80%
Chinook Salmon [Commercial Gear]			0.00		0.00	0	0.00	0.00	0	0.00	
Chinook Salmon [Non-Commercial Gear]			11.80			161	2.60	0.83	15 Individual	0.24	80%
Chinook Salmon [Rod and Reel]			5.90			0	0.00	0.00	0	0.00	
Pink Salmon	82.40	64.70	64.70	44.10	23.50	3348	54.00	17.16	1240 Individual	20.00	25%
Pink Salmon [Commercial Gear]			26.50		5.90	1177	18.98	6.03	436 Individual	7.03	46%
Pink Salmon [Non-Commercial Gear]			38.20			1526	24.61	7.82	565 Individual	9.11	35%
Pink Salmon [Rod and Reel]			29.40			645	10.40	3.31	239 Individual	3.85	59%
Sockeye Salmon	79.40	64.70	64.70	47.10	26.50	11422	184.23	58.54	2662 Individual	42.94	30%
Sockeye Salmon [Commercial Gear]			29.40		11.80	2472	39.87	12.67	576 Individual	9.29	42%
Sockeye Salmon [Non-Commercial Gear]			50.00			8785	141.69	45.02	2048 Individual	33.03	35%
Sockeye Salmon [Rod and Reel]			14.70			164	2.55	0.84	38 Individual	0.61	86%
Salmon Roe	35.30	29.40	17.60	14.70	5.90						
Salmon Roe [Non-Commercial Gear]			17.60								
Salmon Roe [Rod and Reel]			0.00								

Table 7. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzinkie, 1986.

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Alt	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
Non-Salmon Fish	91.20	73.50	67.60	61.80	44.10	13352	215.35	68.43	13353 Pounds		215.37	28%
Non-Salmon [Commercial Gear]			29.40		8.80	1776	28.65	9.10	1776 Pounds		28.65	65%
Non-Salmon [Non-Commercial Gear]			50.00			6061	97.76	31.06	6061 Pounds		97.76	36%
Non-Salmon [Rod and Reel]			50.00			5516	88.97	28.27	5516 Pounds		88.97	38%
Cod	52.90	29.40	26.50	32.40	14.70	1273	20.53	6.52	428 Individual		6.92	50%
Cod [Non-Commercial Gear]			20.60			759	12.24	3.89	237 Individual		3.82	61%
Cod [Rod and Reel]			11.80			514	8.29	2.63	191 Individual		3.08	72%
Tom Cod	2.90	2.90	2.90	0.00	0.00	18	0.29	0.09	36 Individual		0.58	133%
Tom Cod [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Tom Cod [Rod and Reel]			2.90			18	0.29	0.09	36 Individual		0.58	133%
Unknown Cod	52.90	29.40	26.50	32.40	14.70	1255	20.24	6.43	392 Individual		6.32	50%
Unknown Cod [Non-Commercial Gear]			20.60			759	12.24	3.89	237 Individual		3.82	61%
Unknown Cod [Rod and Reel]			8.80			496	8.00	2.54	155 Individual		2.50	85%
Flounder	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Flounder [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Flounder [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Sole	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sole [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Sole [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Halibut	70.60	67.60	55.90	52.90	32.40	6291	101.47	32.24	6291 Pounds		101.47	35%
Halibut [Commercial Gear]			26.50		5.90	857	13.82	4.39	857 Pounds		13.82	46%
Halibut [Non-Commercial Gear]			26.50			3780	60.97	19.37	73 Individual		1.18	41%
Halibut [Rod and Reel]			8.80			1655	26.69	8.48	50 Individual		0.81	63%
Herring	17.60	20.60	14.70	8.80	5.90	1379	22.24	7.07	38 6 Gal Bckt		0.61	73%
Herring [Commercial Gear]			5.90		2.90	919	14.82	4.71	26 6 Gal Bckt		0.42	100%
Herring [Non-Commercial Gear]			8.80			459	7.40	2.35	13 6 Gal Bckt		0.21	92%
Herring [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Roe on Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Roe on Kelp [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Roe on Kelp [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Rockfish	55.90	38.20	35.30	29.40	17.60	1313	21.18	6.73	602 Individual		9.71	42%
Rockfish [Non-Commercial Gear]			20.60			693	11.18	3.55	219 Individual		3.53	60%
Rockfish [Rod and Reel]			20.60			620	10.00	3.18	383 Individual		6.18	54%
Red Rockfish	38.20	23.50	23.50	17.60	5.90	657	10.60	3.37	164 Individual		2.65	50%
Red Rockfish [Non-Commercial Gear]			20.60			583	9.40	2.99	146 Individual		2.35	56%
Red Rockfish [Rod and Reel]			2.90			73	1.18	0.37	18 Individual		0.29	133%
Sea Bass	35.30	26.50	23.50	20.60	14.70	574	9.26	2.94	383 Individual		6.18	48%
Sea Bass [Non-Commercial Gear]			2.90			109	1.76	0.56	73 Individual		1.18	131%
Sea Bass [Rod and Reel]			20.60			465	7.50	2.38	310 Individual		5.00	53%
Unknown Rockfish	5.90	5.90	5.90	0.00	0.00	82	1.32	0.42	55 Individual		0.89	96%
Unknown Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	

Table 7. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzinkie, 1988.

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean Hft	Percapita	Total	Units	Mean Hft	Harvest
Unknown Rockfish [Rod and Reel]												
Irish Lord	2.90	2.90	5.90	0.00	0.00	82	1.32	0.42	55 Individual		0.89	96%
Irish Lord [Non-Commercial Gear]			2.90	0.00	0.00	18	0.29	0.09	18 Pounds		0.29	133%
Irish Lord [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Eel	2.90	0.00	0.00	2.90	0.00	18	0.29	0.09	18 Pounds		0.29	133%
Eel [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Eel [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Shark	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Shark [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Shark [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Pollock	2.90	2.90	2.90	2.90	0.00	128	2.06	0.66	91 Individual		1.47	131%
Pollock [Non-Commercial Gear]			2.90			128	2.06	0.66	91 Individual		1.47	131%
Pollock [Rod and Reel]			0.00			0	0.00	0.00	0		0.00	
Trout and Char	61.80	50.00	44.10	29.40	23.50	2951	47.60	15.12	2108 Individual		34.00	42%
Trout and Char [Non-Commercial Gear]			14.70			242	3.90	1.24	173 Individual		2.79	78%
Trout and Char [Rod and Reel]			41.20			2709	43.69	13.88	1935 Individual		31.21	43%
Char	29.40	23.50	20.60	14.70	11.80	516	8.32	2.64	368 Individual		5.94	53%
Char [Non-Commercial Gear]			5.90			179	2.89	0.92	128 Individual		2.06	100%
Char [Rod and Reel]			17.60			337	5.44	1.73	241 Individual		3.89	60%
Dolly Varden	29.40	23.50	20.60	14.70	11.80	516	8.32	2.64	368 Individual		5.94	53%
Dolly Varden [Non-Commercial Gear]			2.90			179	2.89	0.92	128 Individual		2.06	71%
Dolly Varden [Rod and Reel]			8.80			337	5.44	1.73	241 Individual		3.89	43%
Trout	52.90	47.10	44.10	20.60	20.60	2435	39.27	12.48	1740 Individual		28.06	42%
Trout [Non-Commercial Gear]			8.80			64	1.03	0.33	46 Individual		0.74	106%
Trout [Rod and Reel]			41.20			2372	38.26	12.16	1694 Individual		27.32	43%
Lake Trout	47.10	41.20	38.20	17.60	17.60	2305	37.18	11.81	1647 Individual		26.56	44%
Lake Trout [Non-Commercial Gear]			5.90			51	0.82	0.26	36 Individual		0.58	133%
Lake Trout [Rod and Reel]			35.30			2254	36.35	11.55	1610 Individual		25.97	45%
Rainbow Trout	11.80	14.70	8.80	0.00	5.90	38	0.61	0.19	27 Individual		0.44	96%
Rainbow Trout [Non-Commercial Gear]			2.90			0	0.00	0.00	0		0.00	
Rainbow Trout [Rod and Reel]			8.80			38	0.61	0.19	27 Individual		0.44	96%
Steelhead	14.70	8.80	8.80	5.90	2.90	41	0.66	0.21	29 Individual		0.47	75%
Steelhead [Non-Commercial Gear]			2.90			13	0.21	0.07	9 Individual		0.15	133%
Steelhead [Rod and Reel]			5.90			28	0.45	0.14	20 Individual		0.32	89%
Unknown Trout	2.90	2.90	2.90	0.00	0.00	51	0.82	0.26	36 Individual		0.58	133%
Unknown Trout [Non-Commercial Gear]			0.00			0	0.00	0.00	0		0.00	
Unknown Trout [Rod and Reel]			2.90			51	0.82	0.26	36 Individual		0.58	133%
GAME	79.40	55.90	55.90	47.10	23.50	13651	220.18	69.96	600 Individual		9.68	36%
Big Game	79.40	55.90	52.90	47.10	23.50	12947	208.82	66.35	175 Individual		2.82	28%
Brown Bear	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Caribou	5.90	2.90	2.90	2.90	0.00	547	8.82	2.80	4 Individual		0.06	125%

Table 7. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzinkie, 1986.

Resource Name	Use	Att	Harv	Recv	Give	FOUNDS HARVESTED Total Mean FH Per capita	AMOUNT HARVESTED Total Units Mean FH	90% CONT. LIMIT (%) Harvest
Deer	76.50	55.90	52.90	38.20	23.50	11169	180.15	57.24
Elk	32.40	14.70	5.90	29.40	5.90	1231	19.85	6.31
Goat	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00
Moose	8.80	2.90	0.00	8.80	0.00	0	0.00	0.00
Reindeer	2.90	0.00	0.00	2.90	0.00	0	0.00	0.00
Sheep	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00
Small Game/Furbearer	44.10	38.20	38.20	11.80	11.80	704	11.35	3.61
Fox	2.90	2.90	2.90	0.00	2.90	0	0.00	0.00
Red Fox	2.90	2.90	2.90	0.00	2.90	0	0.00	0.00
Beaver	2.90	2.90	2.90	0.00	2.90	0	0.00	0.00
Hare	44.10	38.20	38.20	11.80	11.80	704	11.35	3.61
Land Otter	2.90	2.90	2.90	0.00	2.90	0	0.00	0.00
Weasel	2.90	2.90	2.90	0.00	2.90	0	0.00	0.00
MARINE MAMMALS	58.80	47.10	47.10	26.50	23.50	5855	94.44	30.01
Whale	2.90	0.00	0.00	2.90	0.00	0	0.00	0.00
Black Fin Whale	2.90	0.00	0.00	2.90	0.00	0	0.00	0.00
Seal	52.90	44.10	44.10	17.60	23.50	5035	81.21	25.80
Harbor Seal	52.90	44.10	44.10	17.60	23.50	5035	81.21	25.80
Sea Lion	17.60	11.80	8.80	11.80	2.90	821	13.24	4.21
Sea Otter	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00
BIRDS AND EGGS	82.40	64.70	61.80	50.00	38.20	1708	27.55	8.75
Upland Game Birds	5.90	5.90	2.90	2.90	2.90	25	0.40	0.13
Ptarmigan	5.90	5.90	2.90	2.90	2.90	25	0.40	0.13
Migratory Birds	82.40	58.80	55.90	41.20	32.40	1401	22.80	7.18
Ducks	82.40	58.80	55.90	41.20	32.40	1287	20.76	6.60
Geese	11.80	11.80	8.80	2.90	2.90	115	1.85	0.59
Eggs	47.10	44.10	41.20	29.40	26.50	281	4.53	1.44
MARINE INVERTEBRATES	76.50	61.80	61.80	52.90	26.50	5505	88.79	28.21
MARINE INVERTEBRATES-Commercial	76.50	61.80	61.80	52.90	26.50	379	6.11	1.94
MARINE INVERTEBRATES-Non Commercial	76.50	61.80	61.80	52.90	26.50	5126	82.68	26.27
Clams	76.50	61.80	61.80	41.20	20.60	1681	27.11	8.62
Clams-Non Commercial	76.50	61.80	61.80	41.20	20.60	1681	27.11	8.62
Butter Clams	73.50	61.80	61.80	35.30	20.60	1488	24.00	7.63
Butter Clams-Non Commercial	73.50	61.80	61.80	35.30	20.60	1488	24.00	7.63
Razor Clams	17.60	8.80	8.80	11.80	2.90	193	3.11	0.99
Razor Clams-Non Commercial	17.60	8.80	8.80	11.80	2.90	193	3.11	0.99
Horse Clams (Gaper)	2.90	2.90	2.90	2.90	2.90	0	0.00	0.00
Horse Clams (Gaper)-Non Commercial	2.90	2.90	2.90	2.90	2.90	0	0.00	0.00
Crabs	61.80	38.20	38.20	44.10	14.70	1494	24.10	7.86
Crabs-Commercial	61.80	38.20	38.20	44.10	14.70	197	3.18	1.01
Crabs-Non Commercial	61.80	38.20	38.20	44.10	14.70	1297	20.92	6.85

Table 7. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzinkie, 1986.

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		85% Cont. Limit (lb)	
	Use	Att	Harv	Recv	Give	Total	Mean H/H	Percapita	Total	Units	Mean H/H	Harvest
Dungeness Crab	47.10	35.30	35.30	29.40	11.80	365	5.89	1.87	522	Individual	8.42	52%
Dungeness Crab-Commercial		5.90	2.90		0.00	25	0.40	0.13	36	Individual	0.58	133%
Dungeness Crab-Non Commercial	47.10	32.40	32.40	29.40	11.80	340	5.48	1.74	485	Individual	7.82	55%
King Crab	35.30	29.40	26.50	26.50	14.70	725	11.69	3.72	315	Individual	5.08	51%
King Crab-Commercial		2.90	2.90		0.00	84	1.35	0.43	36	Individual	0.58	133%
King Crab-Non Commercial	35.30	26.50	23.50	26.50	14.70	642	10.35	3.29	279	Individual	4.50	56%
Tanner Crab	38.20	26.50	20.60	32.40	11.80	402	6.48	2.06	252	Individual	4.06	57%
Tanner Crab-Commercial		11.80	5.90		2.90	87	1.40	0.45	55	Individual	0.89	96%
Tanner Crab-Non Commercial	38.20	17.60	17.60	32.40	11.80	315	5.08	1.61	197	Individual	3.18	67%
Cockles	29.40	23.50	23.50	11.80	5.90	331	5.34	1.70	35	6 Gal Bckt	0.56	62%
Cockles-Non Commercial	29.40	23.50	23.50	11.80	5.90	331	5.34	1.70	35	6 Gal Bckt	0.56	62%
Geoducks	5.90	8.80	5.90	0.00	0.00	37	0.60	0.19	73	Individual	1.18	102%
Geoducks-Non Commercial	5.90	8.80	5.90	0.00	0.00	37	0.60	0.19	73	Individual	1.18	102%
Scallops	8.80	2.90	2.90	5.90	0.00	18	0.29	0.09	18	Pounds	0.29	133%
Scallops-Non Commercial	8.80	2.90	2.90	5.90	0.00	18	0.29	0.09	18	Pounds	0.29	133%
Mussels	8.80	8.80	8.80	0.00	0.00	47	0.76	0.24	5	6 Gal Bckt	0.08	100%
Mussels-Non Commercial	8.80	8.80	8.80	0.00	0.00	47	0.76	0.24	5	6 Gal Bckt	0.08	100%
Chitons	55.90	47.10	47.10	26.50	20.60	438	7.06	2.24	47	6 Gal Bckt	0.76	53%
Chitons-Non Commercial	55.90	47.10	47.10	26.50	20.60	438	7.06	2.24	47	6 Gal Bckt	0.76	53%
Bidarkis (large)	55.90	47.10	47.10	26.50	20.60	438	7.06	2.24	47	6 Gal Bckt	0.76	53%
Bidarkis (large)-Non Commercial	55.90	47.10	47.10	26.50	20.60	438	7.06	2.24	47	6 Gal Bckt	0.76	53%
Octopus	50.00	50.00	50.00	17.60	17.60	963	15.53	4.94	241	Individual	3.89	51%
Octopus-Non Commercial	50.00	50.00	50.00	17.60	17.60	963	15.53	4.94	241	Individual	3.89	51%
Sea Cucumber	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sea Cucumber-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Sea Urchin	35.30	35.30	35.30	11.80	11.80	44	0.71	0.23	15	6 Gal Bckt	0.24	39%
Sea Urchin-Non Commercial	35.30	35.30	35.30	11.80	11.80	44	0.71	0.23	15	6 Gal Bckt	0.24	39%
Shrimp	35.30	11.80	11.80	32.40	5.90	447	7.21	2.29	447	Pounds	7.21	75%
Shrimp-Commercial		2.90	2.90		0.00	182	2.94	0.93	182	Pounds	2.94	131%
Shrimp-Non Commercial	35.30	8.80	8.80	32.40	5.90	264	4.26	1.35	264	Pounds	4.26	94%
Snails	2.90	2.90	2.90	0.00	0.00	7	0.11	0.04	18	Quarts	0.29	133%
Snails-Non Commercial	2.90	2.90	2.90	0.00	0.00	7	0.11	0.04	18	Quarts	0.29	133%
Limpets	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
Limpets-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0		0.00	
PLANTS AND BERRIES	85.30	79.40	79.40	20.60	20.60	932	15.03	4.78	932	Pounds	15.03	20%
Berries	85.30	79.40	79.40	20.60	20.60	821	13.24	4.21	821	Quarts	13.24	19%
Plants/Greens/Mushrooms	17.60	14.70	14.70	2.90	0.00	71	1.15	0.36	71	Quarts	1.15	64%
Seaweed/Kelp	17.60	17.60	17.60	0.00	0.00	40	0.65	0.21	40	Pounds	0.65	120%

SOURCE: Alaska Dept. of Fish and Game, Division of Subsistence, Household Surveys, 1987.

Table 8. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1986.

Number of Households Sampled = 65.00  
 Number of Households in Community = 90.00  
 Estimated Number of People in Community = 298.31

Resource Name	Percentage of Households					Pounds Harvested		Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	
ALL RESOURCES	98.50	93.80	93.80	86.20	75.40	98705	1096.72	98705 Pounds	1096.72	16%
FISH	98.50	90.80	87.70	76.90	61.50	63761	708.46	63761 Pounds	708.46	19%
FISH [Commercial Gear]			36.90		26.20	16184	179.82	16184 Pounds	179.82	41%
FISH [Non-Commercial Gear]			64.60			30009	333.43	30009 Pounds	333.43	20%
FISH [Rod and Reel]			66.20			17568	195.20	17568 Pounds	195.20	20%
SALMON	93.80	89.20	86.20	58.50	55.40	47428	526.98	9120 Individual	101.33	19%
Salmon [Commercial Gear]			30.80		20.00	13640	151.56	2634 Individual	29.27	43%
Salmon [Non-Commercial Gear]			63.10			25933	288.14	4936 Individual	54.84	20%
Salmon [Rod and Reel]			43.10			7853	87.26	1551 Individual	17.23	29%
Chum Salmon	12.30	36.90	18.50	3.10	3.10	1320	14.67	241 Individual	2.68	51%
Chum Salmon [Commercial Gear]			7.70		3.10	994	11.04	181 Individual	2.01	66%
Chum Salmon [Non-Commercial Gear]			10.80			327	3.63	60 Individual	0.67	46%
Chum Salmon [Rod and Reel]			0.00			0	0.00	0	0.00	
Coho Salmon	76.90	86.20	80.00	27.70	43.10	22730	252.56	3481 Individual	38.68	18%
Coho Salmon [Commercial Gear]			24.60		12.30	5995	66.61	918 Individual	10.20	45%
Coho Salmon [Non-Commercial Gear]			36.90			10679	118.66	1635 Individual	18.17	28%
Coho Salmon [Rod and Reel]			33.80			6058	67.31	928 Individual	10.31	35%
Chinook Salmon	26.20	27.70	13.80	20.00	6.20	4761	52.90	432 Individual	4.80	63%
Chinook Salmon [Commercial Gear]			6.20		3.10	1114	12.38	101 Individual	1.12	86%
Chinook Salmon [Non-Commercial Gear]			7.70			3616	40.18	328 Individual	3.64	80%
Chinook Salmon [Rod and Reel]			1.50			31	0.34	3 Individual	0.03	100%
Pink Salmon	64.60	73.80	61.50	32.30	27.70	4568	50.76	1692 Individual	18.80	20%
Pink Salmon [Commercial Gear]			18.50		12.30	1036	11.51	384 Individual	4.27	41%
Pink Salmon [Non-Commercial Gear]			24.60			2012	22.36	745 Individual	8.28	34%
Pink Salmon [Rod and Reel]			27.70			1522	16.91	564 Individual	6.27	35%
Sockeye Salmon	81.50	76.90	67.70	47.70	33.80	14048	156.09	3275 Individual	36.39	24%
Sockeye Salmon [Commercial Gear]			24.60		15.40	4503	50.03	1050 Individual	11.67	51%
Sockeye Salmon [Non-Commercial Gear]			52.30			9302	103.36	2168 Individual	24.09	26%
Sockeye Salmon [Rod and Reel]			7.70		6.20	244	2.71	57 Individual	0.63	49%
Salmon Roe	16.90	13.80	10.80	6.20	6.20					
Salmon Roe [Non-Commercial Gear]			10.80							
Salmon Roe [Rod and Reel]			0.00							



Table 8. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1986.

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Mean HH
Non-Salmon Fish	95.40	76.90	69.20	67.70	44.60	16333	181.48	55.12	16333 Pounds	181.48
Non-Salmon [Commercial Gear]			15.40		12.30	2543	28.26	8.58	2544 Pounds	28.27
Non-Salmon [Non-Commercial Gear]			24.60			4075	45.28	13.75	4075 Pounds	45.28
Non-Salmon [Rod and Reel]			52.30			9715	107.94	32.79	9714 Pounds	107.93
Cod	46.20	26.20	24.60	26.20	13.80	1646	18.29	5.56	518 Individual	5.76
Cod [Non-Commercial Gear]			9.20			678	7.53	2.29	212 Individual	2.36
Cod [Rod and Reel]			15.40			968	10.76	3.27	306 Individual	3.40
Tom Cod	1.50	1.50	1.50	0.00	0.00	2	0.02	0.01	4 Individual	0.04
Tom Cod [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Tom Cod [Rod and Reel]			1.50			2	0.02	0.01	4 Individual	0.04
Unknown Cod	46.20	24.60	23.10	26.20	13.80	1643	18.26	5.54	514 Individual	5.71
Unknown Cod [Non-Commercial Gear]			9.20			678	7.53	2.29	212 Individual	2.36
Unknown Cod [Rod and Reel]			13.80			966	10.73	3.26	302 Individual	3.36
Flounder	4.60	4.60	4.60	0.00	1.50	75	0.83	0.25	25 Individual	0.28
Flounder [Non-Commercial Gear]			1.50			21	0.23	0.07	7 Individual	0.08
Flounder [Rod and Reel]			3.10			54	0.60	0.18	18 Individual	0.20
Sole	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Sole [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Sole [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Halibut	92.30	67.70	60.00	63.10	44.60	11699	129.99	39.48	11699 Pounds	129.99
Halibut [Commercial Gear]			13.80		10.80	1821	20.23	6.15	1821 Pounds	20.23
Halibut [Non-Commercial Gear]			15.40			2347	26.08	7.92	71 Individual	0.79
Halibut [Rod and Reel]			35.40			7531	83.68	25.42	227 Individual	2.52
Herring	3.10	29.20	6.20	3.10	4.60	1022	11.36	3.45	28 6 Gal Bckt	0.31
Herring [Commercial Gear]			4.60			723	8.03	2.44	20 6 Gal Bckt	0.22
Herring [Non-Commercial Gear]			1.50			299	3.32	1.01	8 6 Gal Bckt	0.08
Herring [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Roe on Kelp	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Roe on Kelp [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Roe on Kelp [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Rockfish	18.50	13.80	13.80	9.20	6.20	449	4.99	1.52	288 Individual	3.20
Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Rockfish [Rod and Reel]			13.80			449	4.99	1.52	288 Individual	3.20
Red Rockfish	4.60	1.50	1.50	3.10	0.00	28	0.31	0.09	7 Individual	0.08
Red Rockfish [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Red Rockfish [Rod and Reel]			1.50			28	0.31	0.09	7 Individual	0.08
Sea Bass	15.40	13.80	13.80	6.20	6.20	380	4.22	1.28	253 Individual	2.81
Sea Bass [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Sea Bass [Rod and Reel]			13.80			380	4.22	1.28	253 Individual	2.81
Unknown Rockfish	1.50	1.50	1.50	0.00	0.00	41	0.46	0.14	28 Individual	0.31
Unknown Rockfish [Non-Commercial Ge			0.00			0	0.00	0.00	0	0.00

Table 8. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1986.

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	
Unknown Rockfish [Rod and Reel]			1.50			41	0.46	0.14	28 Individual	0.31
Irish Lord	3.10	3.10	3.10	0.00	1.50	291	3.23	0.98	291 Pounds	3.23
Irish Lord [Non-Commercial Gear]			3.10			291	3.23	0.98	291 Pounds	3.23
Irish Lord [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Eel	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00
Eel [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Eel [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Shark	1.50	1.50	1.50	0.00	1.50	2	0.02	0.01	1 Pounds	0.01
Shark [Non-Commercial Gear]			1.50			2	0.02	0.01	1 Pounds	0.01
Shark [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Pollock	1.50	0.00	0.00	1.50	0.00	0	0.00	0.00	0	0.00
Pollock [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Pollock [Rod and Reel]			0.00			0	0.00	0.00	0	0.00
Trout and Char	44.60	40.00	40.00	12.30	10.80	1149	12.77	3.88	821 Individual	9.12
Trout and Char [Non-Commercial Gear]			7.70			438	4.87	1.48	313 Individual	3.48
Trout and Char [Rod and Reel]			35.40			711	7.90	2.40	508 Individual	5.64
Char	27.70	24.60	24.60	7.70	9.20	551	6.12	1.86	393 Individual	4.37
Char [Non-Commercial Gear]			7.70			205	2.28	0.69	147 Individual	1.63
Char [Rod and Reel]			18.50			345	3.83	1.16	246 Individual	2.73
Dolly Varden	27.70	24.60	24.60	7.70	9.20	551	6.12	1.86	393 Individual	4.37
Dolly Varden [Non-Commercial Gear]			3.80			205	2.28	0.69	147 Individual	1.63
Dolly Varden [Rod and Reel]			9.20			345	3.83	1.16	246 Individual	2.73
Trout	29.20	26.20	26.20	6.20	4.60	599	6.66	2.02	428 Individual	4.76
Trout [Non-Commercial Gear]			4.60			232	2.58	0.78	166 Individual	1.84
Trout [Rod and Reel]			21.50			366	4.07	1.24	262 Individual	2.91
Lake Trout	7.70	7.70	7.70	0.00	1.50	84	0.93	0.28	60 Individual	0.67
Lake Trout [Non-Commercial Gear]			1.50			10	0.11	0.03	7 Individual	0.08
Lake Trout [Rod and Reel]			6.20			74	0.82	0.25	53 Individual	0.59
Rainbow Trout	16.90	15.40	15.40	3.10	1.50	184	2.04	0.62	132 Individual	1.47
Rainbow Trout [Non-Commercial Gear]			0.00			0	0.00	0.00	0	0.00
Rainbow Trout [Rod and Reel]			15.40			184	2.04	0.62	132 Individual	1.47
Steelhead	9.20	7.70	7.70	3.10	1.50	318	3.53	1.07	227 Individual	2.52
Steelhead [Non-Commercial Gear]			3.10			213	2.37	0.72	152 Individual	1.69
Steelhead [Rod and Reel]			4.60			104	1.16	0.35	75 Individual	0.83
Unknown Trout	3.10	3.10	3.10	0.00	0.00	14	0.16	0.05	10 Individual	0.11
Unknown Trout [Non-Commercial Gear]			1.50			10	0.11	0.03	7 Individual	0.08
Unknown Trout [Rod and Reel]			1.50			4	0.04	0.01	3 Individual	0.03
GAME	86.20	69.20	64.60	52.30	38.50	21774	241.93	73.48	625 Individual	6.94
Big Game	86.20	67.70	63.10	52.30	38.50	21519	239.10	72.62	267 Individual	2.97
Brown Bear	3.10	3.10	3.10	0.00	1.50	969	10.77	3.27	3 Individual	0.03
Caribou	6.20	3.10	1.50	4.60	1.50	208	2.31	0.70	1 Individual	0.01

Table 8. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1986.

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		50% Conf. Limit (%)
	Use	Att	Harv	Recv	Total	Mean HH	Percapita	Total	Units	
Deer	83.10	64.60	60.00	40.00	13640	151.56	48.03	231 Individual	2.57	22%
Elk	55.40	29.20	24.60	32.30	4673	51.92	15.77	21 Individual	0.23	23%
Goat	6.20	1.50	1.50	4.60	101	1.12	0.34	1 Individual	0.01	100%
Moose	13.80	4.60	3.10	10.80	1496	16.62	5.05	3 Individual	0.03	66%
Reindeer	3.10	1.50	1.50	1.50	433	4.81	1.46	7 Individual	0.08	100%
Sheep	1.50	0.00	0.00	1.50	0	0.00	0.00	0	0.00	
Small Game/Furbearer	13.80	15.40	10.80	3.10	255	2.83	0.86	359 Individual	3.99	74%
Fox	3.10	4.60	1.50	0.00	0	0.00	0.00	42 Individual	0.47	102%
Red Fox	3.10	4.60	1.50	0.00	0	0.00	0.00	42 Individual	0.47	102%
Beaver	4.60	6.20	3.10	0.00	0	0.00	0.00	101 Individual	1.12	101%
Hare	10.80	12.30	9.20	3.10	255	2.83	0.86	127 Individual	1.41	69%
Land Otter	3.10	4.60	1.50	0.00	0	0.00	0.00	89 Individual	0.99	103%
Weasel	1.50	3.10	0.00	0.00	0	0.00	0.00	0	0.00	
MARINE MAMMALS	12.30	12.30	10.80	1.50	1921	21.34	6.48	71 Individual	0.78	57%
Whale	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Black Fin Whale	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Seal	10.80	9.20	9.20	1.50	1450	16.11	4.89	28 Individual	0.31	53%
Harbor Seal	10.80	9.20	9.20	1.50	1450	16.11	4.89	28 Individual	0.31	53%
Sea Lion	1.50	1.50	1.50	0.00	471	5.23	1.59	3 Individual	0.03	100%
Sea Otter	4.60	6.20	4.60	0.00	0	0.00	0.00	40 Individual	0.44	82%
BIRDS AND EGGS	58.50	38.50	36.90	30.80	598	6.84	2.02	894 Individual	9.93	23%
Upland Game Birds	6.20	7.70	4.60	1.50	87	0.97	0.29	125 Individual	1.39	97%
Partridge	6.20	7.70	4.60	1.50	87	0.97	0.29	125 Individual	1.39	97%
Migratory Birds	58.50	36.90	35.40	29.20	484	5.38	1.63	598 Individual	6.64	23%
Ducks	58.50	36.90	35.40	29.20	484	5.38	1.63	598 Individual	6.64	23%
Geese	0.00	3.10	0.00	0.00	0	0.00	0.00	0	0.00	
Eggs	12.30	10.80	10.80	3.10	26	0.29	0.09	172 Individual	1.91	38%
MARINE INVERTEBRATES	96.90	84.60	81.50	72.30	9599	106.66	32.40	9599 Pounds	106.66	18%
MARINE INVERTEBRATES-Commercial		24.60	7.70	3.10	366	4.07	1.24	367 Pounds	4.08	56%
MARINE INVERTEBRATES-Non Commercial	96.90	81.50	81.50	72.30	9232	102.58	31.16	9233 Pounds	102.59	19%
Clams	86.20	75.40	75.40	33.80	3923	43.59	13.24	417 6 Gal Bckt	4.63	23%
Clams-Non Commercial	86.20	75.40	75.40	33.80	3923	43.59	13.24	417 6 Gal Bckt	4.63	23%
Butter Clams	86.20	75.40	75.40	27.70	3714	41.27	12.53	395 6 Gal Bckt	4.39	21%
Butter Clams-Non Commercial	86.20	75.40	75.40	27.70	3714	41.27	12.53	395 6 Gal Bckt	4.39	21%
Razor Clams	13.80	4.60	4.60	10.80	208	2.31	0.70	22 6 Gal Bckt	0.24	72%
Razor Clams-Non Commercial	13.80	4.60	4.60	10.80	208	2.31	0.70	22 6 Gal Bckt	0.24	72%
Horse Clams (Gaper)	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Horse Clams (Gaper)-Non Commercial	0.00	0.00	0.00	0.00	0	0.00	0.00	0	0.00	
Crabs	92.30	50.80	44.60	67.70	3899	43.32	13.16	2178 Individual	24.20	26%
Crabs-Commercial	92.30	50.80	44.60	67.70	3899	43.32	13.16	2178 Individual	24.20	26%
Crabs-Non Commercial	0.00	24.60	7.70	3.10	366	4.07	1.24	273 Individual	3.03	56%
	0.00	44.60	44.60	67.70	3532	39.24	11.92	1905 Individual	21.17	26%

Table 8. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1986.

Resource Name	Percentage of Households					Pounds Harvested		Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	
Dungeness Crab	30.80	23.10	18.50	16.90	12.30	347	3.86	496	Individual	5.51
Dungeness Crab-Commercial		7.70	3.10	1.50	1.50	92	1.02	132	Individual	1.47
Dungeness Crab-Non Commercial	30.80	18.50	16.90	16.90	12.30	255	2.83	364	Individual	4.04
King Crab	89.20	44.60	40.00	64.60	26.20	2825	31.39	1228	Individual	13.64
King Crab-Commercial		6.20	3.10	0.00	0.00	159	1.77	69	Individual	0.77
King Crab-Non Commercial	89.20	41.50	40.00	64.60	26.20	2686	29.62	1159	Individual	12.88
Tanner Crab	40.00	36.90	24.60	24.60	12.30	726	8.07	454	Individual	5.04
Tanner Crab-Commercial		23.10	6.20	1.50	1.50	115	1.28	72	Individual	0.80
Tanner Crab-Non Commercial	40.00	21.50	21.50	24.60	10.80	611	6.79	382	Individual	4.24
Cockles	4.60	4.60	4.60	0.00	1.50	78	0.87	8	Gal Bckt	0.09
Cockles-Non Commercial	4.60	4.60	4.60	0.00	1.50	78	0.87	8	Gal Bckt	0.09
Geoducks	3.10	3.10	3.10	0.00	0.00	10	0.11	19	Individual	0.21
Geoducks-Non Commercial	3.10	3.10	3.10	0.00	0.00	10	0.11	19	Individual	0.21
Scallops	3.10	0.00	0.00	3.10	0.00	0	0.00	0		0.00
Scallops-Non Commercial	3.10	0.00	0.00	3.10	0.00	0	0.00	0		0.00
Mussels	3.10	3.10	3.10	1.50	0.00	4	0.04	0	Gal Bckt	0.00
Mussels-Non Commercial	3.10	3.10	3.10	1.50	0.00	4	0.04	0	Gal Bckt	0.00
Chitons	35.40	33.80	33.80	6.20	9.20	379	4.21	40	Gal Bckt	0.44
Chitons-Non Commercial	35.40	33.80	33.80	6.20	9.20	379	4.21	40	Gal Bckt	0.44
Bidarkis (large)	35.40	33.80	33.80	6.20	9.20	379	4.21	40	Gal Bckt	0.44
Bidarkis (large)-Non Commercial	35.40	33.80	33.80	6.20	9.20	379	4.21	40	Gal Bckt	0.44
Octopus	32.30	24.60	24.60	13.80	15.40	1196	13.29	289	Individual	3.32
Octopus-Non Commercial	32.30	24.60	24.60	13.80	15.40	1196	13.29	289	Individual	3.32
Sea Cucumber	1.50	1.50	1.50	0.00	0.00	1	0.01	1	Quarts	0.01
Sea Cucumber-Non Commercial	1.50	1.50	1.50	0.00	0.00	1	0.01	1	Quarts	0.01
Sea Urchin	10.80	10.80	10.80	0.00	3.10	28	0.31	9	Gal Bckt	0.10
Sea Urchin-Non Commercial	10.80	10.80	10.80	0.00	3.10	28	0.31	9	Gal Bckt	0.10
Shrimp	9.20	4.60	3.10	7.70	1.50	83	0.92	83	Pounds	0.92
Shrimp-Commercial		1.50	0.00	0.00	0.00	0	0.00	0		0.00
Shrimp-Non Commercial	9.20	3.10	3.10	7.70	1.50	83	0.92	83	Pounds	0.92
Snails	0.00	0.00	0.00	0.00	0.00	0	0.00	0		0.00
Snails-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0		0.00
Limpets	0.00	0.00	0.00	0.00	0.00	0	0.00	0		0.00
Limpets-Non Commercial	0.00	0.00	0.00	0.00	0.00	0	0.00	0		0.00
<b>PLANTS AND BERRIES</b>	<b>63.10</b>	<b>58.50</b>	<b>58.50</b>	<b>10.80</b>	<b>16.90</b>	<b>1054</b>	<b>11.71</b>	<b>1054</b>	<b>Pounds</b>	<b>11.71</b>
Berries	61.50	58.50	56.90	9.20	16.90	794	8.82	793	Quarts	8.81
Plants/Greens/Mushrooms	9.20	9.20	9.20	1.50	3.10	122	1.36	122	Quarts	1.36
Seaweed/Kelp	10.80	6.20	9.20	3.10	0.00	139	1.54	138	Pounds	1.53
SOURCE: Alaska Dept. of Fish and Game, Division of Subsistence, Household Surveys, 1987.										

Table 9. Estimated Percentages of Salmon Harvest by Geartype and Species, Akhiok, 1986

Resource	Removed From Commercial Catch		Subsistence Methods		Rod and Reel		Any Method	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SALMON								
Chum Salmon	0.00%	0.00%	95.62%	94.23%	4.38%	5.77%		
Coho Salmon	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	4.66%	5.27%
Chinook Salmon	0.00%	0.00%	87.82%	87.79%	12.18%	12.21%	34.15%	45.85%
Pink Salmon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sockeye Salmon	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	15.57%	8.64%
	0.00%	0.00%	99.61%	99.54%	0.47%	0.44%	45.62%	40.25%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 1986

Table 10. Estimated Percentages of Salmon Harvest by Geartype and Species, Karluk, 1986

Resource	From Commercial Catch		Subsistence Methods		Rod and Reel		Any Method	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SALMON								
Chum Salmon	4.09%	4.31%	93.48%	93.96%	2.45%	1.74%	0.45%	0.57%
Coho Salmon	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	8.70%	12.71%
Chinook Salmon	8.02%	7.95%	91.98%	92.05%	0.00%	0.00%	2.24%	5.52%
Pink Salmon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.94%	6.61%
Sockeye Salmon	4.15%	4.23%	74.63%	74.66%	21.07%	21.11%	77.69%	74.60%
	3.59%	3.59%	96.41%	96.41%	0.00%	0.00%		

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 1986

Table 11. Estimated Percentages of Salmon Harvest by Gear type and Species, Larsen Bay, 1986

Resource	Removed From Commercial Catch		Subsistence Methods		Rod and Reel		Any Method	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SALMON								
Chum Salmon	51.71%	53.97%	45.20%	41.82%	3.08%	4.21%		
Coho Salmon	50.00%	50.00%	50.00%	50.00%	0.00%	0.00%	0.22%	0.27%
Chinook Salmon	55.76%	55.81%	36.67%	36.67%	7.57%	7.53%	24.09%	32.40%
Pink Salmon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.42%	7.78%
Sockeye Salmon	39.10%	39.00%	60.90%	60.92%	0.00%	0.00%	13.12%	7.30%
	51.33%	51.34%	47.34%	47.34%	1.33%	1.34%	59.11%	52.25%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 1986

Table 12. Estimated Percentages of Salmon Harvest by Geartype and Species, Old Harbor, 1986

Resource	Removed From Commercial Catch		Subsistence Methods		Rod and Reel		Any Method	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SALMON								
Chum Salmon	59.40%	58.21%	30.34%	30.83%	10.26%	10.96%	21.48%	23.58%
Coho Salmon	59.25%	59.25%	27.55%	27.54%	13.20%	13.20%	34.56%	45.20%
Chinook Salmon	48.40%	48.40%	37.83%	37.83%	13.77%	13.77%	0.95%	2.10%
Pink Salmon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.55%	13.28%
Sockeye Salmon	59.39%	59.37%	32.10%	32.09%	8.54%	8.52%	18.44%	15.84%
	78.10%	78.12%	18.77%	18.79%	3.09%	3.10%		

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 1986



Table 13. Estimated Percentages of Salmon Harvest by Geartype and Species, Ouzinkie, 1986

Resource	Removed From Commercial Catch		Subsistence Methods		Rod and Reel		Any Method	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
ALMON								
Chum Salmon	30.30%	30.02%	58.94%	58.59%	10.74%	11.39%	13.21%	14.54%
Coho Salmon	65.70%	65.62%	32.90%	32.91%	1.50%	1.46%	34.88%	45.74%
Chinook Salmon	23.55%	23.55%	56.70%	56.72%	19.75%	19.74%	0.20%	0.43%
Pink Salmon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.43%	8.91%
Sockeye Salmon	35.16%	35.16%	45.56%	45.58%	19.27%	19.27%	35.27%	30.38%
	21.64%	21.64%	76.93%	76.91%	1.43%	1.44%		

Table 14. Estimated Percentages of Salmon Harvest by Geartype and Species, Port Lions, 1986

Resource	Removed From Commercial Catch		Subsistence Methods		Rod and Reel		Any Method	
	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SALMON								
Chum Salmon	28.88%	28.76%	54.12%	54.68%	17.01%	16.56%		
Coho Salmon	75.10%	75.30%	24.90%	24.77%	0.00%	0.00%	2.64%	2.78%
Chinook Salmon	26.37%	26.37%	46.97%	46.98%	26.66%	26.65%	38.17%	47.93%
Pink Salmon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.74%	10.04%
Sockeye Salmon	22.70%	22.68%	44.03%	44.05%	33.33%	33.32%	18.55%	9.63%
	32.06%	32.05%	66.20%	66.22%	1.74%	1.74%	35.91%	29.62%

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 1986

TABLE 15. COMPARISON OF SUBSISTENCE HARVEST ESTIMATES FOR KODIAK ISLAND BOROUGH COMMUNITIES, POUNDS EDIBLE WEIGHT PER HOUSEHOLD AND PER CAPITA, 1982/83 AND 1986.

	<u>Pounds per Household</u>		<u>Pounds Per Capita</u>	
	<u>1982/83</u>	<u>1986</u>	<u>1982/83</u>	<u>1986</u>
Akhiok	1, 979	582	519	162
Karluk	3, 409	1, 541	863	385
Larsen Bay	1,677	683	404	209
Old Harbor	1,861	1, 347	491	423
Ouzinkie	1, 234	1, 268	369	403
Port Lions	911	1, 097	280	333

Source: Scott et al. 1993

TABLE 16. PER CAPITA SUBSISTENCE HARVESTS, POUNDS EDIBLE WEIGHT, BY RESOURCE CATEGORY, KODIAK ISLAND BOROUGH COMMUNITIES, 1982/83 AND 1986

<u>Pounds Usable Weight per Person</u>													
	<u>Salmon</u> <u>1982/31986</u>	<u>Other Fish</u> <u>1982/31986</u>	<u>Marine</u>		<u>Land Mammals</u> <u>1982/31986</u>	<u>Marine Mammals</u> <u>1982/31986</u>	<u>Birds &amp; Eggs</u> <u>1982/31986</u>	<u>Wild Plants<sup>a</sup></u> <u>1986</u>					
			<u>Invertebrates</u> <u>1982/31986</u>	<u>1982/31986</u>									
Akhiok	238	111	29	7	44	10	41	31	153	2	13	<1	1
Karluk	582	255	101	42	13	13	67	45	89	25	11	3	2
Larsen Bay	168	102	74	36	36	24	62	40	58	3	5	1	4
Old Harbor	234	187	69	41	30	23	73	60	79	106	6	4	1
Ouzinkie	173	193	62	68	51	28	39	70	32	30	12	9	5
Port Lions	98	160	99	55	36	32	36	73	8	6	3	2	4

<sup>a</sup> Harvest quantities for wild plants were not collected for 1982/3

Source: Scott et al. 1993

TABLE 17. SUBSISTENCE HARVESTS FOR SELECTED GULF OF ALASKA COMMUNITIES

<u>Community</u>	<u>1986 Population<sup>a</sup></u>	<u>Study Year</u>	<u>Per Capita Harvest, Pounds Usable Weight</u>
<b><i>Prince William Sound</i></b>			
Chenega Bay	<b>60</b>	<b>1985/6</b>	374
<b>Cordova</b>	2,053	1985	164
Tatitlek	1 0 8	<b>1987/8</b>	352
Tatitlek	108	<b>1988/9</b>	<b>644</b>
<b><i>Cook Inlet</i></b>			
Nanwalek	205	1987	289
Homer	3,706	1982	94
Kenai	6,647	1982	38
Ninilchik	461	1982	86
Port Graham	195	1987	227
Seldovia	552	1982	51
Tyonek	282	<b>1983/4</b>	260
<b><i>Kodiak Island Borough</i></b>			
Akhiok		<b>1982/3</b>	519
	123	1986	162
Chiniak	NA	1983	217
Karluk		<b>1982/3</b>	863
	107	1986	385
Kodiak City	6,619	1982	147
Larsen Bay		<b>1982/3</b>	404
	169	1986	209
Old Harbor		<b>1982/3</b>	491
	380	1986	423
Ouzinkie		<b>1982/3</b>	369
	195	<b>1986</b>	403
Port Lions		<b>1982/3</b>	280
	296	<b>1986</b>	333
<b><i>Alaska Peninsula</i></b>			
Chignik Bay	155	<b>1984</b>	188
Chignik Lagoon	88	1984	220
Chignik Lake	146	1984	279
False Pass	85	<b>1987/8</b>	430
Ivanof Bay	41	1984	456
Nelson Lagoon	50	<b>1986/7</b>	258
Perryville	127	1984	391

<sup>a</sup> Source: Alaska Department of Labor 1989

Source: Scott et al. 1993

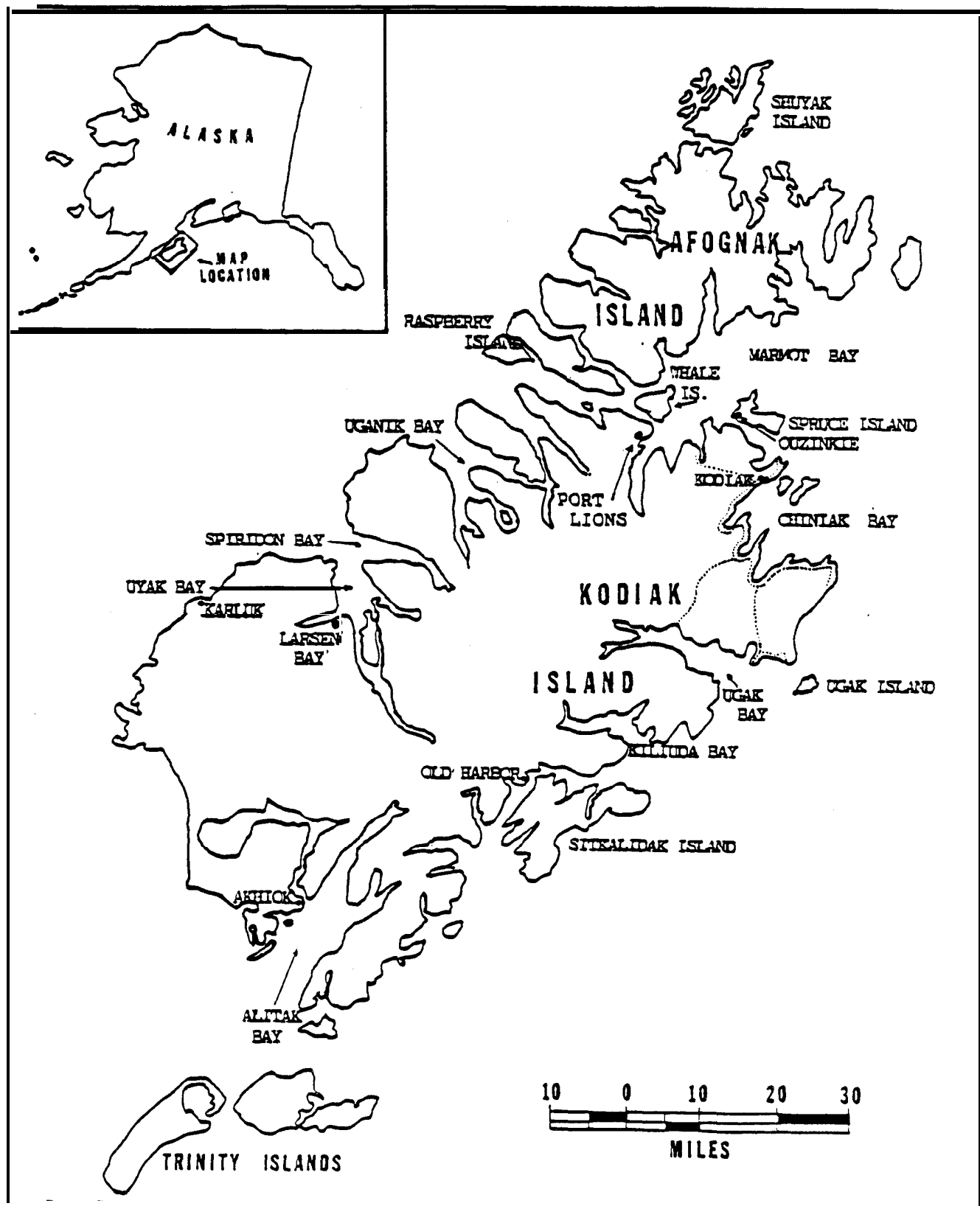
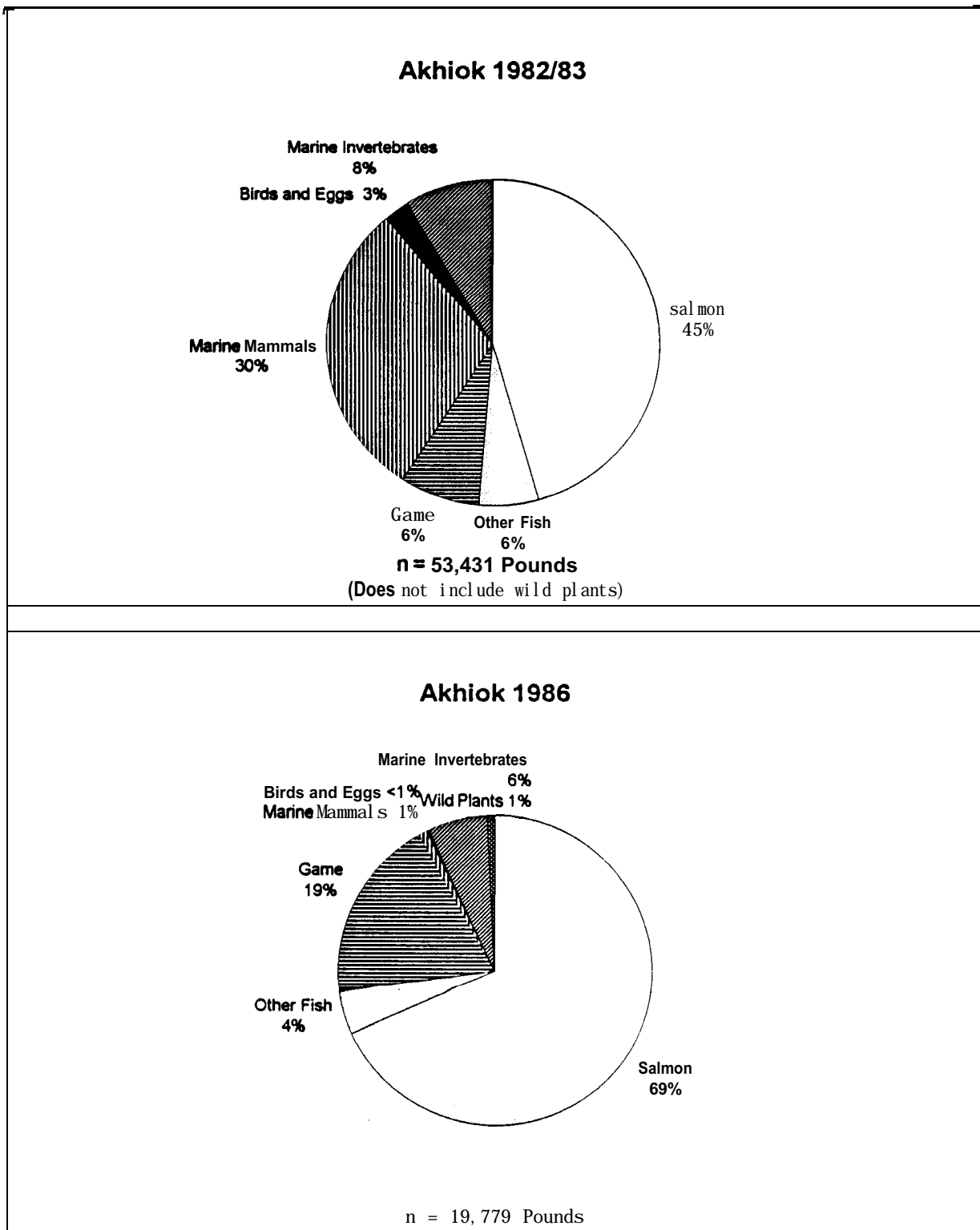


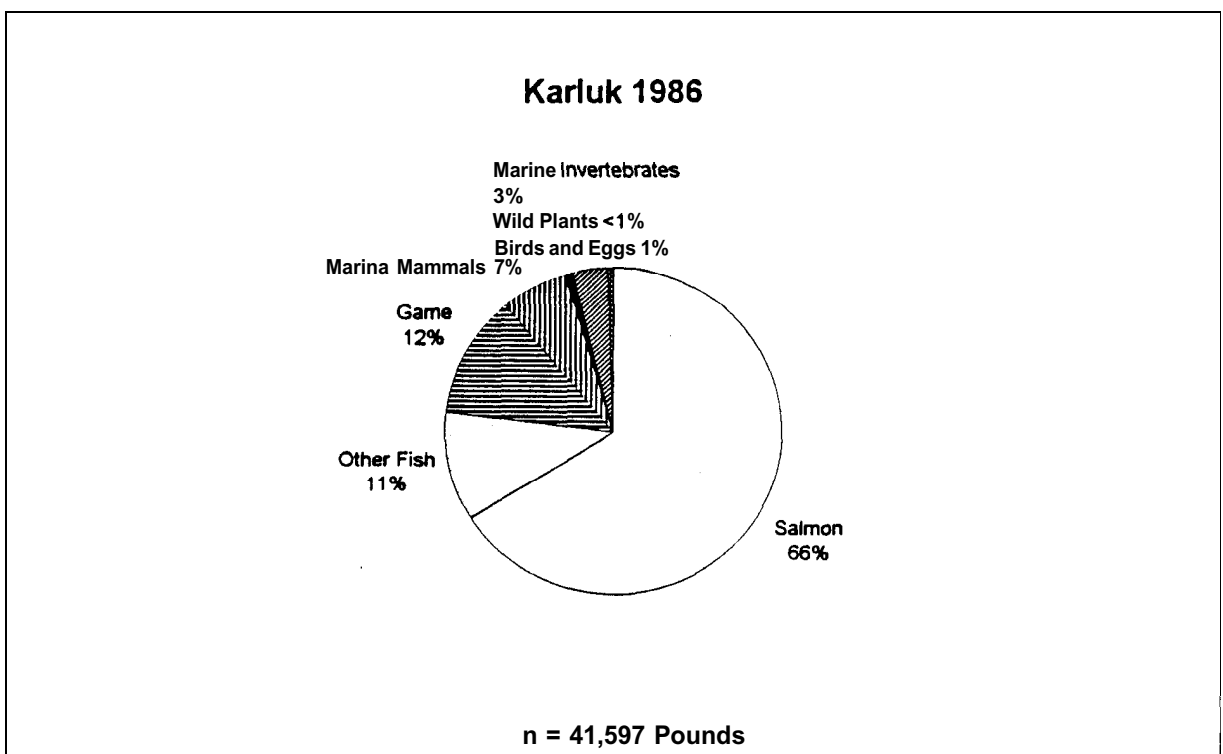
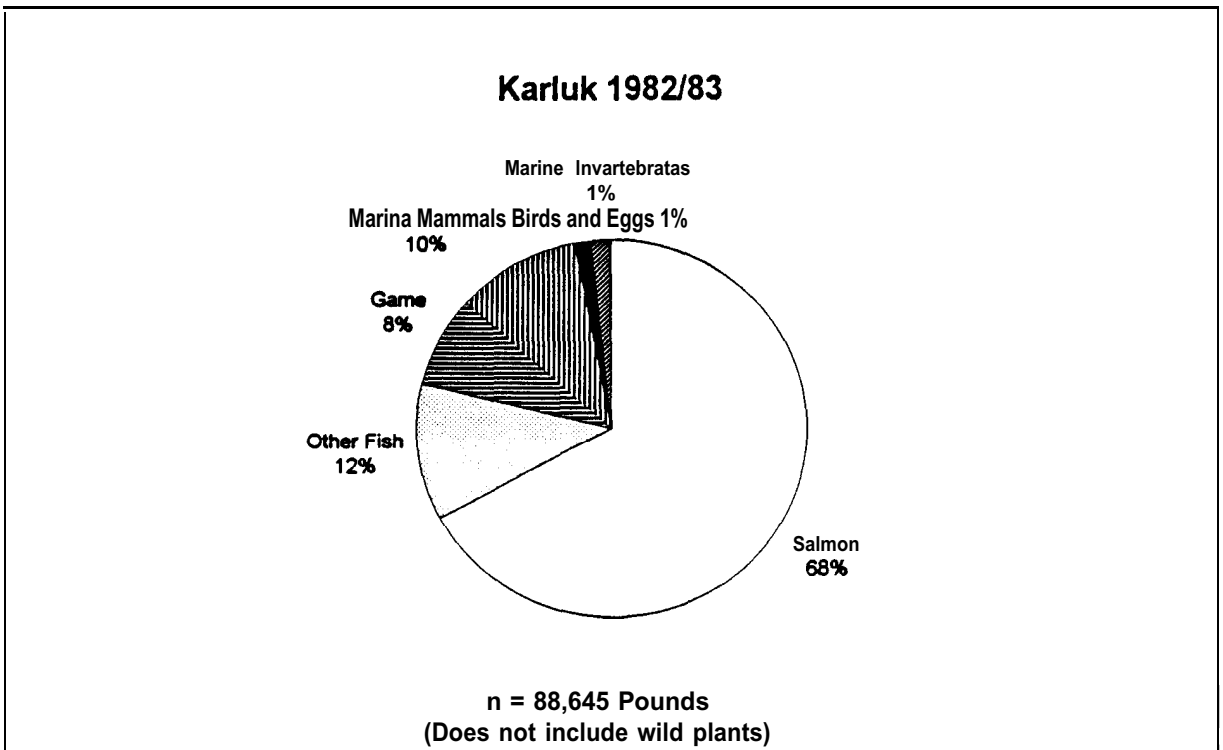
Figure 1. Kodiak Island Region

Figure 2. Composition of Subsistence Resource Harvests, Akhiok, 1982/3 and 1986



SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983 and 1987.

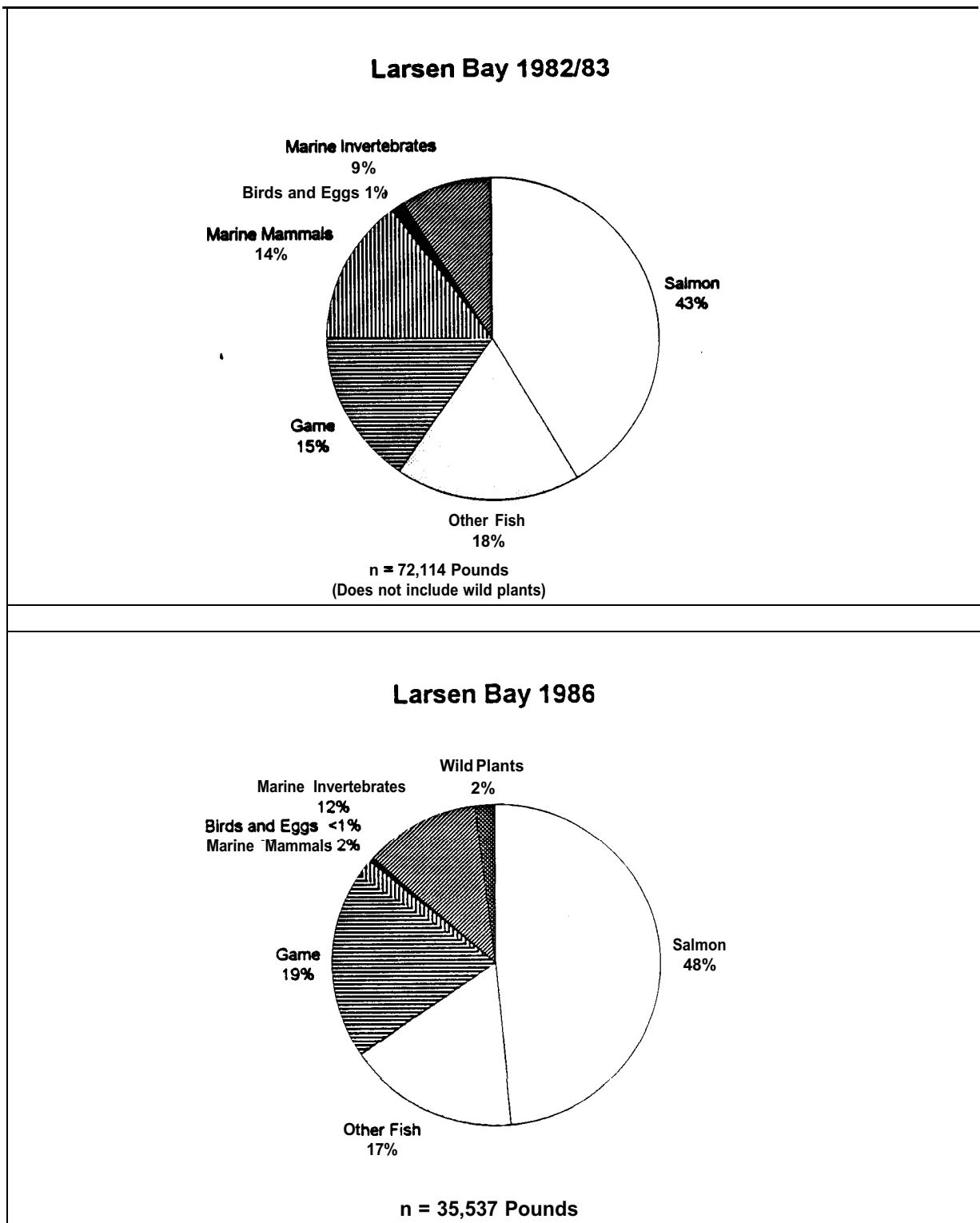
Figure 3. Composition of Subsistence Resource Harvests, Karluk, 1982/3 and 1986



SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983 and 1987.

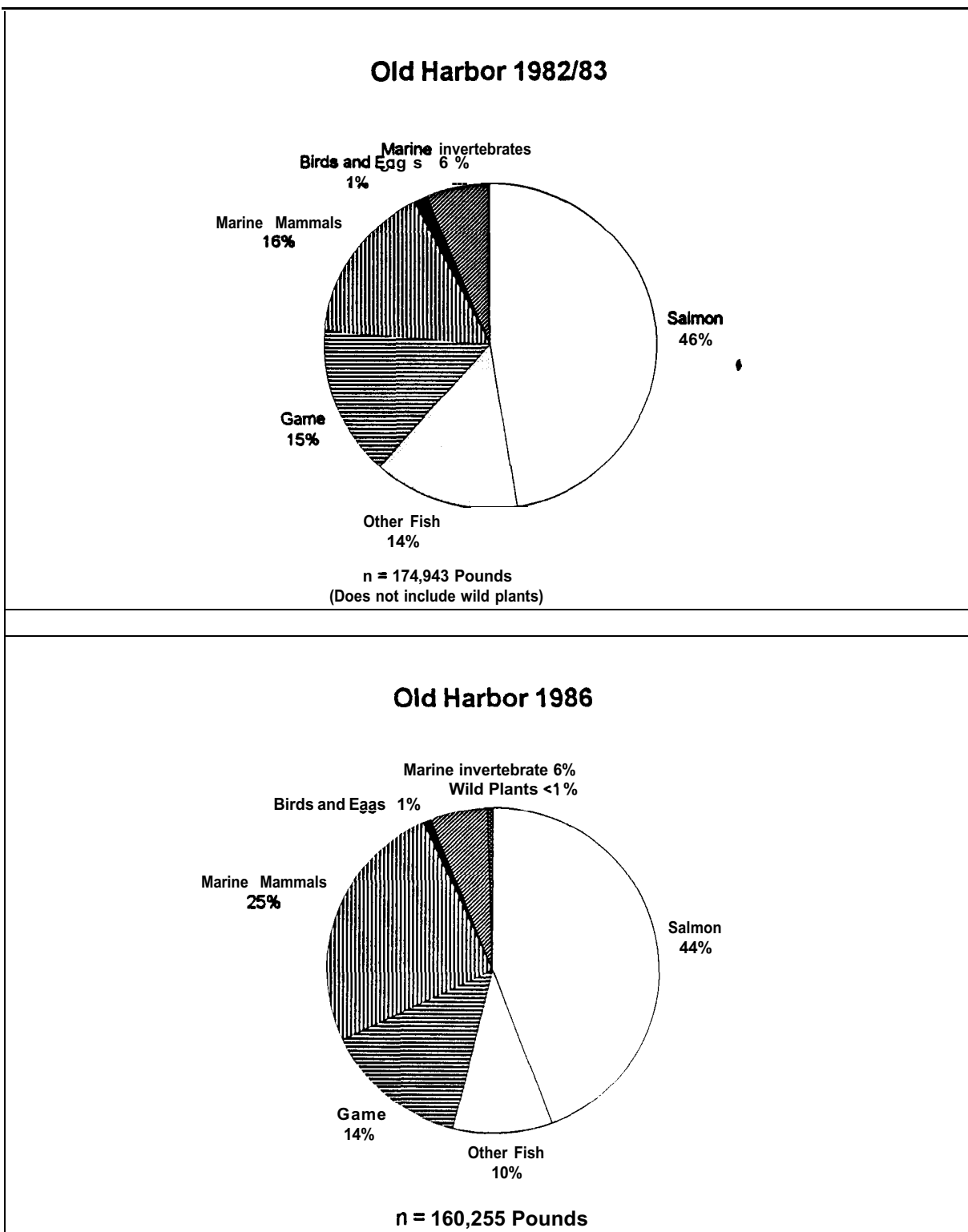


Figure 4. Composition of Subsistence Resource Harvests, Larsen Bay, 1982/3 and 1986



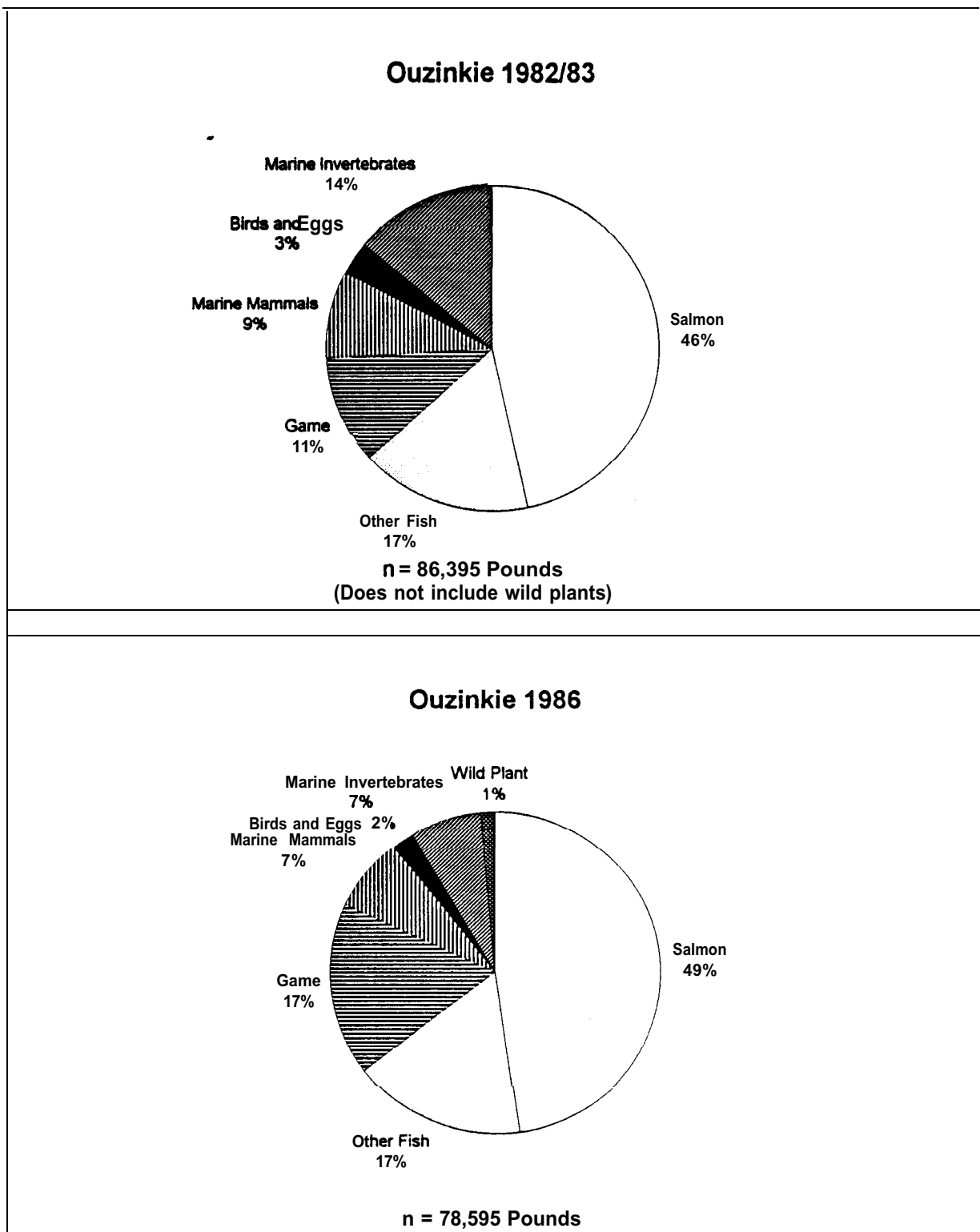
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983 and 1987.

Figure 5. Composition of Subsistence Resource Harvests, Old Harbor, 1982/3 and 1986



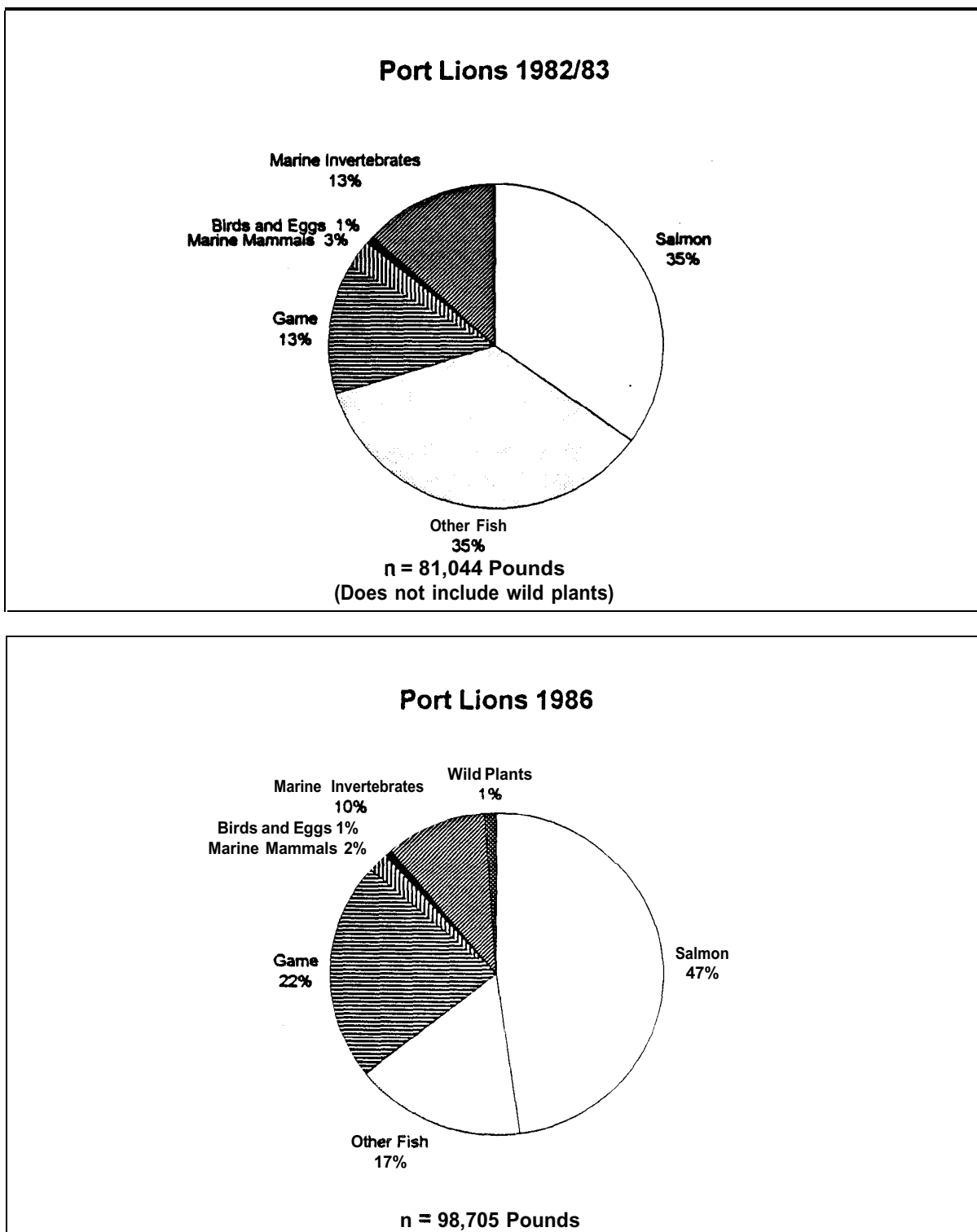
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983 and 1987.

Figure 6. Composition of Subsistence Resource Harvests, Ouzinkie, 1982/3 and 1986



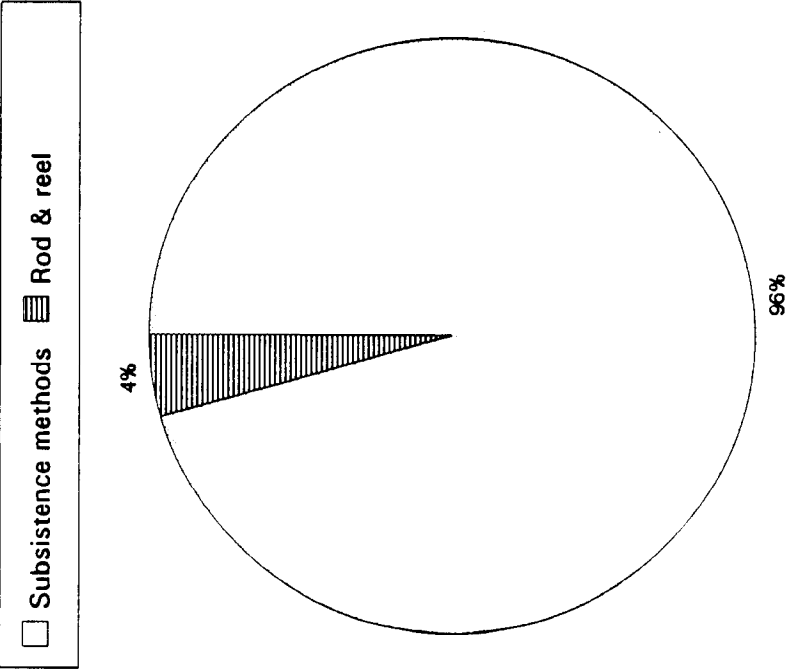
(SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys. 1983 and 1987.

Figure 7. Composition of Subsistence Resource Harvests, Port Lions, 1982/3 and 1986



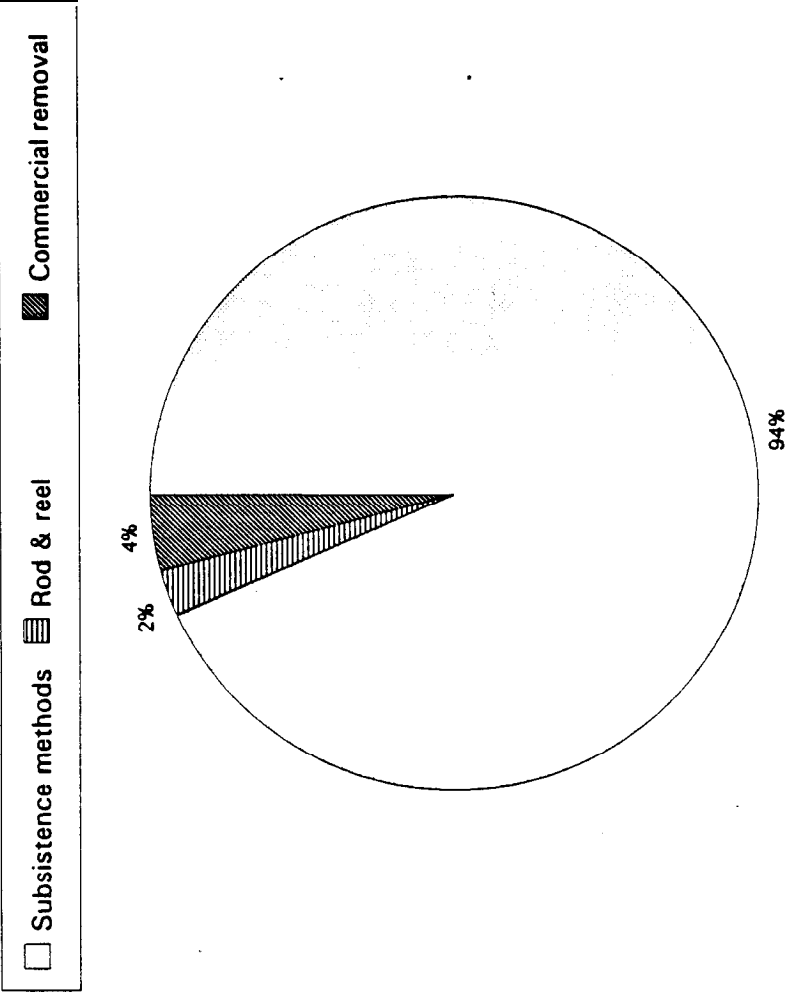
SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983 and 1987.

**Figure 8. Salmon Harvest by Geartype, Akhiok, 1986**



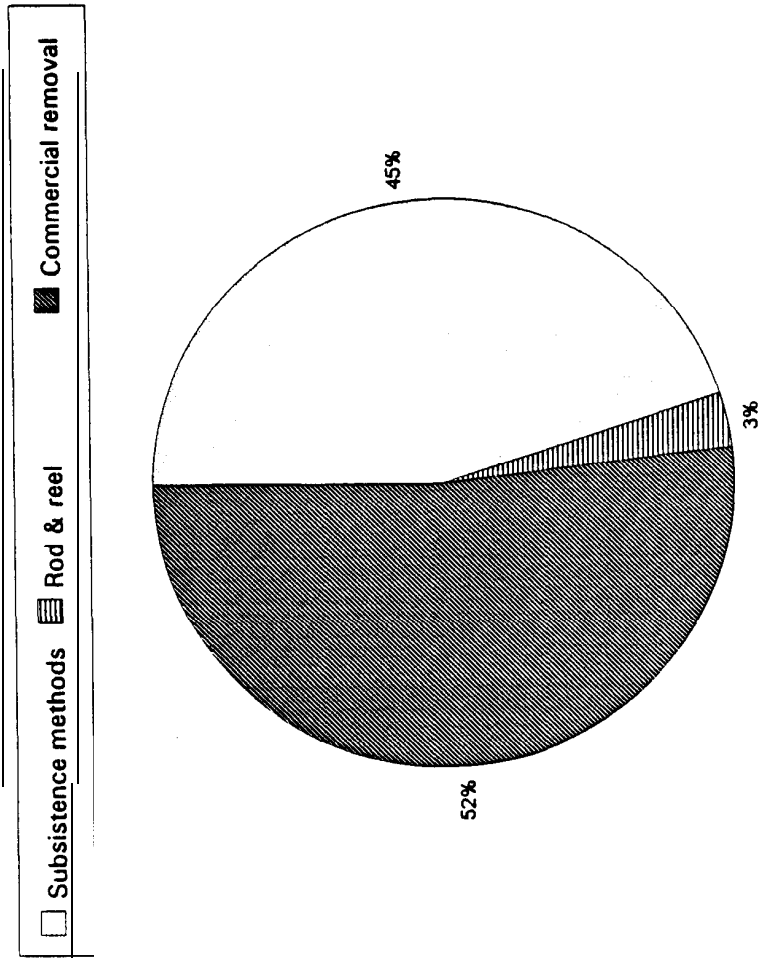
N = 2,788 salmon

**Figure 9. Salmon Harvest by Geartype, Karluk, 1986**



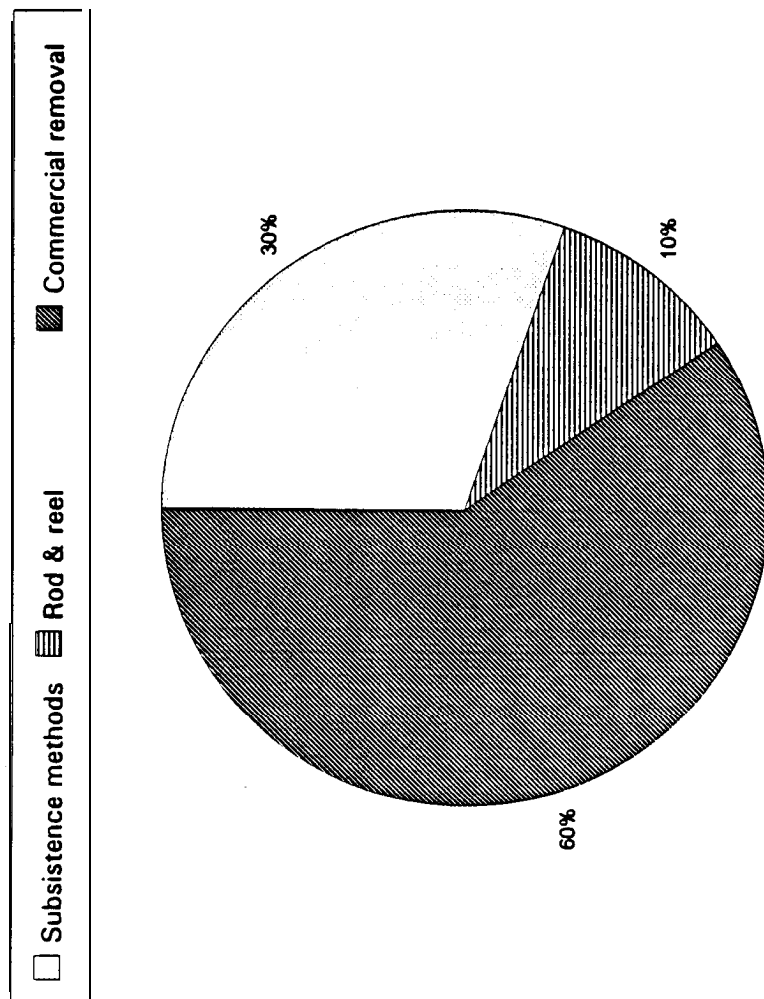
N = 6,163 salmon

**Figure 10. Salmon Harvest by Geartype, Larsen Bay, 1986**



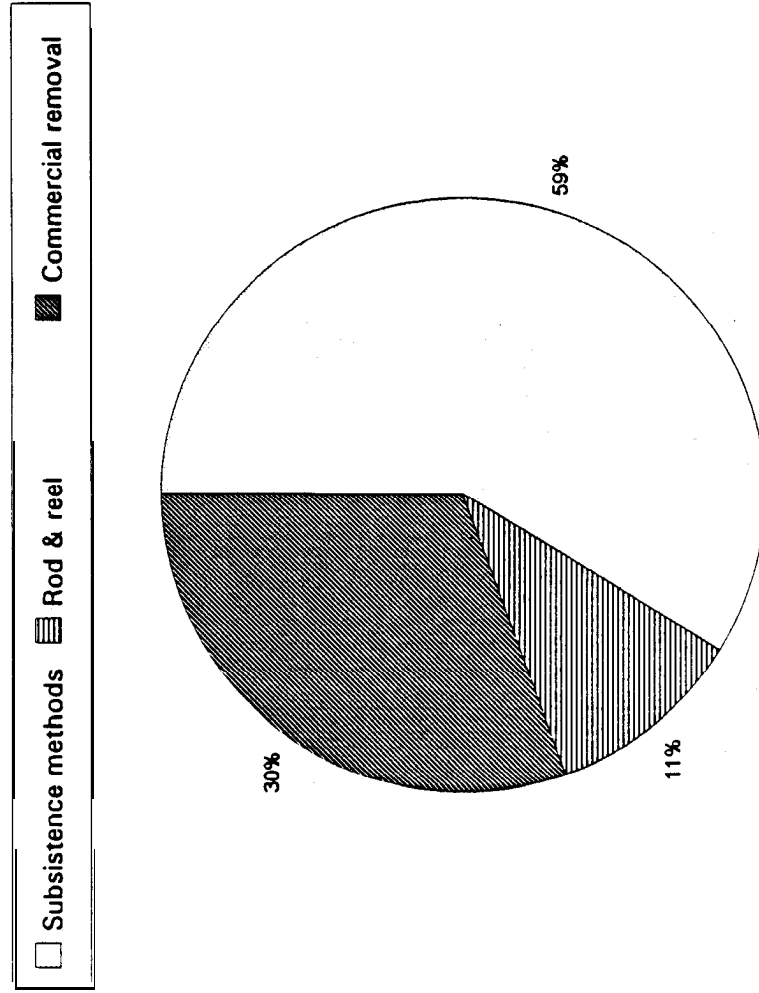
N = 3,566 salmon

**Figure 11. Salmon Harvest by Geartype, Old Harbor, 1986**





**Figure 12. Salmon Harvest by Geartype, Ouzinkie, 1986**



N = 7,548 salmon

**Figure 13. Salmon Harvest by Geartype, Port Lions, 1986**

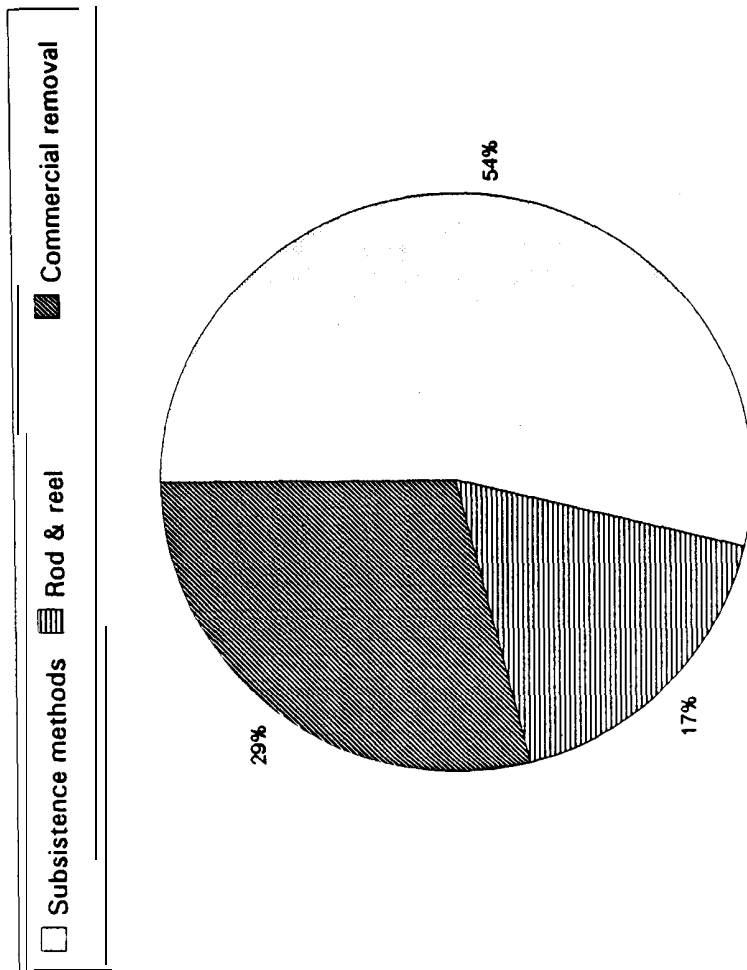


Figure 14. Percentage of Sampled Households Using and Harvesting Wild Resources, Kodiak Island Borough Communities, 1982/3 and 1986

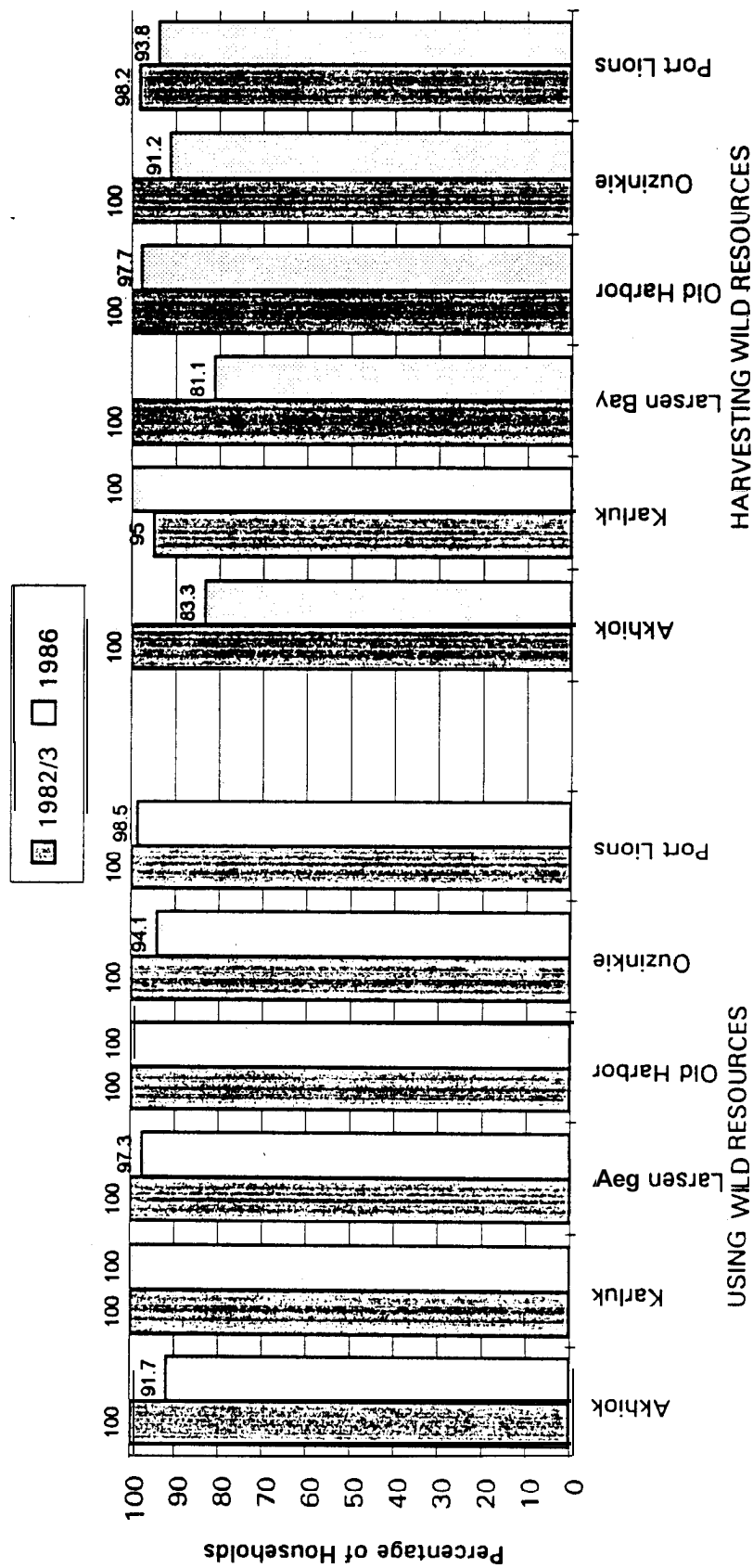
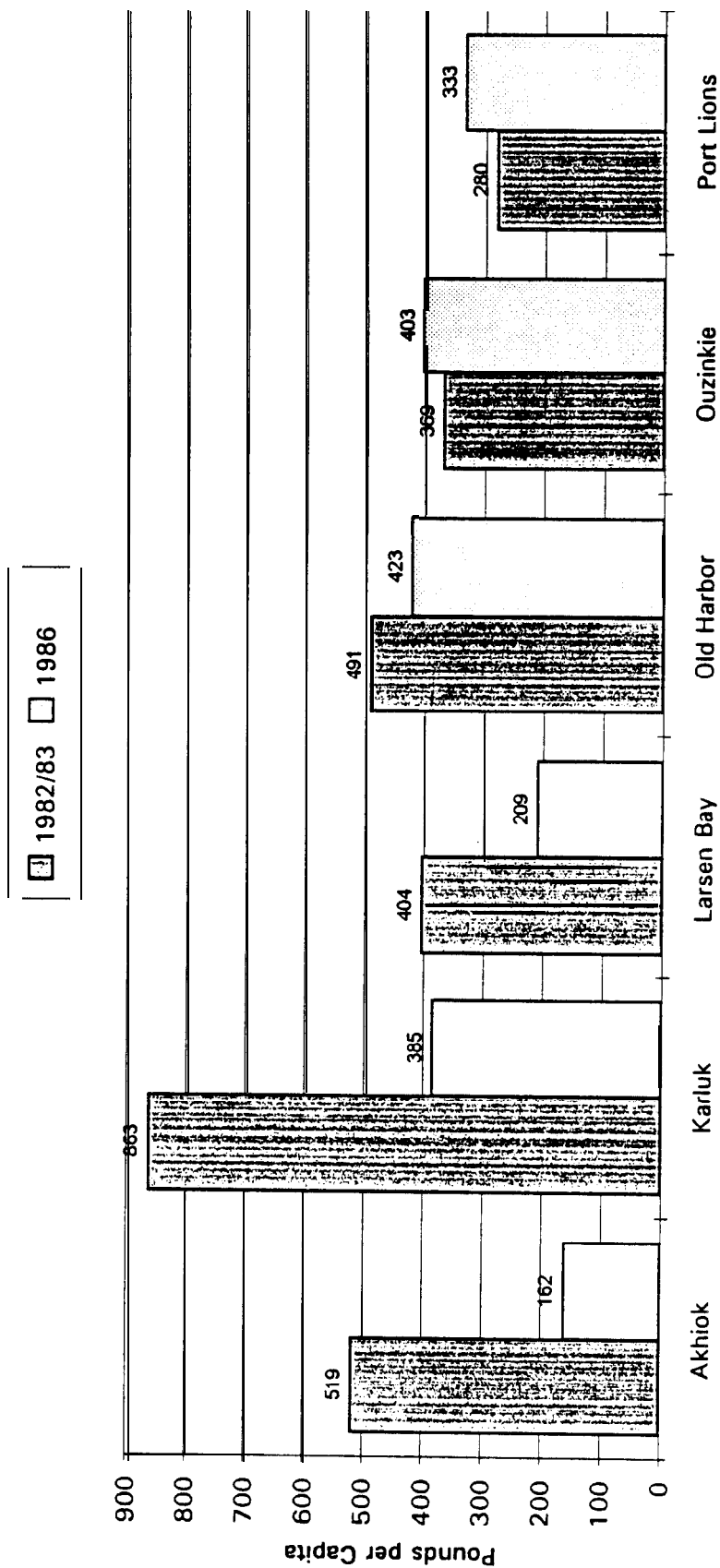
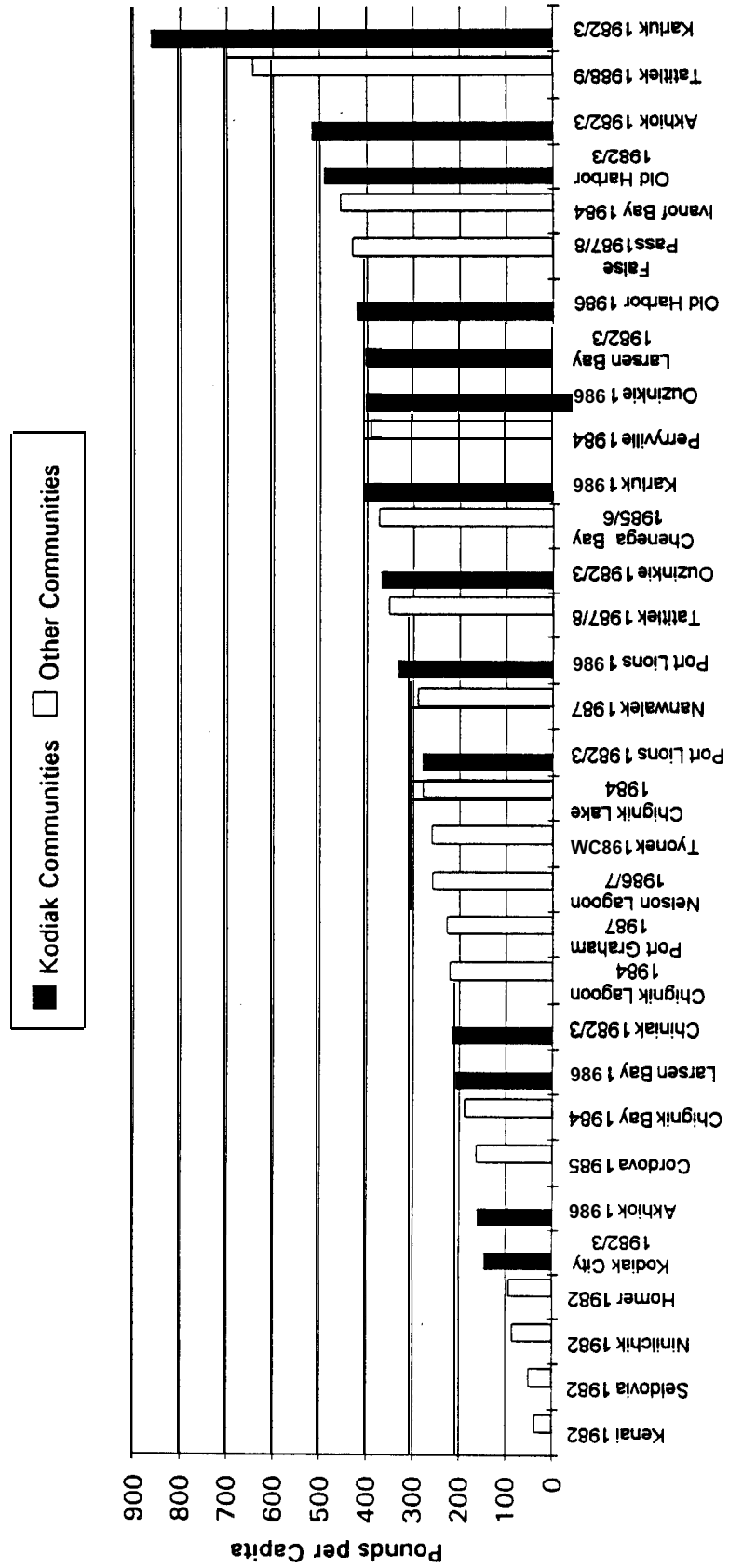


Figure 15. Comparison of Subsistence Harvests, Pounds Usable Weight per Capita, Kodiak Island Borough Communities, 1982/83 and 1986



**Figure 16. Subsistence Harvests, Pounds Usable Weight per Capita, Selected Gulf of Alaska Communities**



**Kodiak  
Area  
Native  
Association**



402 Center Avenue  
Kodiak, Alaska 99615  
Phone (907) 4865725

December 18, 1989

Mr. Jim Fall  
Regional Supervisor  
Division of Subsistence  
333 Raspberry Road  
Anchorage, Alaska 99518-1599

Dear Jim,

Brenda Schwantes and I reviewed the draft copy of the 1983 and 1986 village survey which was conducted by KANA and the Department of Fish and Game, Subsistence Division.

After reviewing the final draft we have come to basically one conclusion. We feel that the pounds of foods harvested for each village has been calculated as less than what is actually harvested and used. The report states some problems in evaluating the information received. This may be part of the innacuracy as well as the fact that three of the villages surveyed Akhiok, Old Harbor, and Ouzinkie only had an average of 42% of the households surveyed. This average total harvest was used as a representative number of all the households in each particular village.

We realize that the total poundage may vary from year to year but out of curiosity we called four of the village Tribal Council Offices and asked how much salmon and deer each family used. The poundage for salmon was as much as 500 pounds greater than what the survey shows.

Our thanks go to the Alaska Department of Fish and Game for implementing this program. We realize a lot of work has gone into reviewing the information and drawing a readable format. If we can assist the Department in updating this information please ask.

Sincerely,

August Aga  
Tribal Operations Coordinator

Brenda Schwantes  
Brenda Schwantes  
Environmental Health Educator

cc: Gary Arenson

Serving the communities of: Akhiok • Karluk • Kodiak • Larsen Bay • Old Harbor • Ouzinkie • Port Lions

## APPENDIX B

### REVISED 1982/83 HARVEST SURVEY DATA FOR KODIAK BOROUGH COMMUNITIES

Akhiok  
Karluk  
Larsen Bay  
Old Harbor  
Ouzinkie  
Port Lions

Appendix Table 1. Estimated Harvest and Use of Fish, Game, and Plant Resources, Akhiok, 1982/1983

Number of Households Sampled = 21.00      Estimated Number of People in Community = 102.86  
 Number of Households in Community = 27.00

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
ALL RESOURCES	100.00		100.00	85.70	76.20	53431	1978.93	519.47	53431 Pounds		1978.93	16%
FISH	100.00		100.00	71.40	57.10	27500	1018.52	287.36	6237 Individual		231.00	13%
SALMON	100.00		100.00			24469	906.26	237.89	5792 Individual		214.52	12%
Chum Salmon	42.90		42.90			2815	104.26	27.37	437 Individual		16.19	27%
Coho Salmon	95.20		95.20			5840	216.30	56.78	855 Individual		31.67	11%
Chinook Salmon	0.00		0.00			0	0.00	0.00	0		0.00	
Pink Salmon	100.00		100.00			6053	224.19	58.85	2301 Individual		85.22	14%
Sockeye Salmon	100.00		100.00			9762	361.56	94.91	2199 Individual		81.44	14%
NON-SALMON FISH	85.70		85.70			3031	112.26	29.47	445 Individual		16.48	34%
Cod	4.80		0.00			0	0.00	0.00	0		0.00	
Flounder	0.00		0.00			0	0.00	0.00	0		0.00	
Sole	0.00		0.00			0	0.00	0.00	0		0.00	
Halibut	81.00		81.00			2506	92.81	24.36	69 Individual		2.56	23%
Herring	0.00		0.00			0	0.00	0.00	0		0.00	
Rockfish	0.00		0.00			0	0.00	0.00	0		0.00	
Red Rockfish	0.00		0.00			0	0.00	0.00	0		0.00	
Sea Bass	0.00		0.00			0	0.00	0.00	0		0.00	
Unknown Rockfish	0.00		0.00			0	0.00	0.00	0		0.00	
Sculpin	4.80		4.80			1	0.04	0.01	1 Individual		0.04	100%
Pollock	0.00		0.00			0	0.00	0.00	0		0.00	
Trout and Char	47.60		42.90			524	19.41	5.09	374 Individual		13.85	38%
Char	47.60		42.90			520	19.26	5.06	372 Individual		13.78	38%
Dolly Varden	47.60		42.90			520	19.26	5.06	372 Individual		13.78	38%
Trout	0.00		4.80			4	0.15	0.04	3 Individual		0.11	66%
Steelhead	0.00		4.80			4	0.15	0.04	3 Individual		0.11	66%



Appendix Table 1. Estimated Harvest, Game, and Plant Resources, Akhiok, 1982/1983

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
GAME											
Big Game	95.20	90.50	81.00	61.90	4247	157.30	41.29	111 Individual		4.11	27%
Brown Bear	95.20	90.50			4221	156.33	41.04	98 Individual		3.63	20%
Caribou	0.00	0.00			0	0.00	0.00	0		0.00	
Deer	0.00	0.00			0	0.00	0.00	0		0.00	
Elk	95.20	90.50			4221	156.33	41.04	98 Individual		3.63	20%
Goat	0.00	0.00			0	0.00	0.00	0		0.00	
Moose	0.00	0.00			0	0.00	0.00	0		0.00	
Small Game/Furbearer	4.80	4.80			26	0.96	0.25	13 Individual		0.48	92%
Fox	0.00	0.00			0	0.00	0.00	0		0.00	
Beaver	0.00	0.00			0	0.00	0.00	0		0.00	
Hare	4.80	4.80			26	0.96	0.25	13 Individual		0.48	92%
Land Otter	0.00	0.00			0	0.00	0.00	0		0.00	
Weasel	0.00	0.00			0	0.00	0.00	0		0.00	
MARINE MAMMALS											
Seal	100.00	95.20			5768	584.00	153.30	143 Individual		5.30	32%
Harbor Seal	100.00	95.20			4968	184.00	48.30	89 Individual		3.30	26%
Sea Lion	100.00	95.20			4968	184.00	48.30	89 Individual		3.30	26%
	76.20	66.70			0800	400.00	105.00	54 Individual		2.00	44%
BIRDS AND EGGS											
Upland Game Birds	100.00	00.00	76.20	61.90	1380	51.11	13.42	1587 Individual		58.78	28%
Ptarmigan	9.50	9.50			103	3.81	1.00	148 Individual		5.48	80%
Migratory Birds	9.50	9.50			103	3.81	1.00	148 Individual		5.48	80%
Ducks	100.00	95.20			1228	45.48	11.94	1112 Individual		41.19	32%
Geese	100.00	95.20			696	25.78	6.77	859 Individual		31.81	31%
Eggs	71.40	66.70			532	19.70	5.17	253 Individual		9.37	39%
	85.70	90.50			49	1.81	0.48	327 Individual		12.11	19%
MARINE INVERTEBRATES											
Clams	100.00	00.00			4536	168.00	44.10	4536 Pounds		168.00	20%
Butter Clams	95.20	95.20			1344	49.78	13.07	172 5 Gal Bckt		6.37	20%
Razor Clams	95.20	95.20			953	35.30	9.27	122 5 Gal Bckt		4.52	20%
	76.20	76.20			391	14.48	3.80	50 5 Gal Bckt		1.85	30%

Appendix Table 1. Estimated Harvest and Use of Fish, Game, and Plant Resources, Akhiok, 1982/1983

Resource Name	Percentage of Households				Give	Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest	
	Use	Att	Harv	Recv		Total	Mean HH	Per capita	Total	Units		
Horse Clams (Gaper)	0.00		0.00			0	0.00	0.00	0		0.00	
Crabs	95.20		90.50			1274	47.19	12.39	585 Individual		21.67	22%
Dungeness Crab	14.30		9.50			9	0.33	0.09	13 Individual		0.48	61%
King Crab	95.20		90.50			1148	42.52	11.16	498 Individual		18.48	24%
Tanner Crab	23.80		23.80			117	4.33	1.14	73 Individual		2.70	46%
Cockles	100.00		100.00			943	34.93	9.17	121 5 Gal Bckt		4.48	24%
Geoducks	0.00		0.00			0	0.00	0.00	0		0.00	
Scallops	0.00		0.00			0	0.00	0.00	0		0.00	
Mussels	0.00		0.00			0	0.00	0.00	0		0.00	
Chitons (gumboots,bidarkis)	19.00		33.30			308	11.41	2.99	40 5 Gal Bckt		1.48	57%
Octopus	71.40		76.20			422	15.63	4.10	105 Individual		3.89	27%
Sea Urchin	42.90		52.40			220	8.15	2.14	88 5 Gal Bckt		3.26	42%
Shrimp	4.80		4.80			26	0.96	0.25	26 Pounds		0.96	92%
PLANTS AND BERRIES												
Berries			95.20	33.30	19.00							
Plants/Greens/Mushrooms			95.20									
Seaweed/Kelp			71.40									
			0.00									

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983.

Appendix Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Karluk, 1982/1983

Number of Households Sampled = 20      Estimated Number of People in Community = 102.7  
 Number of Households in Community = 26

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
ALL RESOURCES	100.00		90.00	100.00	90.00	88645	3409.42	863.15	88645 Pounds		3409.42	13%
FISH	100.00		90.00	100.00	90.00	70160	2698.46	683.15	15919 Individual		612.27	15%
SALMON	100.00		90.00			59821	2300.81	582.48	12826 Individual		493.31	16%
Chum Salmon	30.00		25.00			243	9.35	2.37	38 Individual		1.46	42%
Coho Salmon	90.00		80.00			13034	501.31	126.91	1908 Individual		73.38	28%
Chinook Salmon	100.00		85.00			4375	168.27	42.60	482 Individual		18.54	20%
Pink Salmon	65.00		60.00			5806	223.31	56.53	2207 Individual		84.88	31%
Sockeye Salmon	100.00		85.00			36364	1398.62	354.08	8190 Individual		315.00	16%
NON-SALMON FISH	95.00		90.00			10339	397.65	100.67	3093 Individual		118.96	15%
Cod	60.00		25.00			220	8.46	2.14	69 Individual		2.65	43%
Flounder	85.00		70.00			2547	97.96	24.80	849 Individual		32.65	26%
Sole	0.00		0.00			0	0.00	0.00	0		0.00	
Halibut	90.00		50.00			4646	178.69	45.24	129 Individual		4.96	30%
Herring	0.00		0.00			0	0.00	0.00	0		0.00	
Rockfish	70.00		50.00			989	38.04	9.63	659 Individual		25.35	33%
Red Rockfish	0.00		0.00			0	0.00	0.00	0		0.00	
Sea Bass	70.00		50.00			969	37.27	9.44	646 Individual		24.85	33%
Unknown Rockfish	5.00		5.00			20	0.77	0.19	13 Individual		0.50	92%
Sculpin	10.00		10.00			3	0.12	0.03	5 Individual		0.19	60%
Pollock	0.00		0.00			0	0.00	0.00	0		0.00	
Trout and Char	95.00		85.00			1935	74.42	18.84	1382 Individual		53.15	19%
Char	80.00		75.00			1511	58.12	14.71	1079 Individual		41.50	23%
Dolly Varden	80.00		75.00			1511	58.12	14.71	1079 Individual		41.50	23%
Trout	95.00		75.00			424	16.31	4.13	303 Individual		11.65	26%
Steelhead	95.00		75.00			424	16.31	4.13	303 Individual		11.65	26%

Appendix Table 2. Estimated Harvest and Use of Fish, Game, and Plant Resources, Karluk, 1982/1983

Resource Name	Use	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
		Alt	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
GAME	Big Game	95.00	80.00	90.00	85.00	6842	263.15	66.62	234	Individual	9.00	23%
	Brown Bear	95.00	80.00			6706	257.92	65.30	146	Individual	5.62	19%
	Caribou	5.00	5.00			195	7.50	1.90	1	Individual	0.04	100%
	Deer	20.00	5.00			390	15.00	3.80	3	Individual	0.12	66%
	Elk	95.00	80.00			6121	235.42	59.60	142	Individual	5.46	19%
	Goat	0.00	0.00			0	0.00	0.00	0		0.00	
	Moose	0.00	0.00			0	0.00	0.00	0		0.00	
	Small Game/Furbearer	25.00	25.00			135	5.19	1.31	88	Individual	3.38	43%
	Fox	5.00	10.00			0	0.00	0.00	8	Individual	0.31	62%
	Beaver	5.00	5.00			0	0.00	0.00	3	Individual	0.12	66%
	Hare	20.00	20.00			135	5.19	1.31	68	Individual	2.62	51%
	Land Otter	5.00	5.00			0	0.00	0.00	10	Individual	0.38	100%
	Weasel	5.00	0.00			0	0.00	0.00	0		0.00	
MARINE MAMMALS	Seal	75.00	65.00			9173	352.81	89.32	94	Individual	3.62	20%
	Harbor Seal	70.00	60.00			3713	142.81	36.15	66	Individual	2.54	24%
	Sea Lion	70.00	60.00			3713	142.81	36.15	66	Individual	2.54	24%
		70.00	40.00			5460	210.00	53.16	27	Individual	1.04	33%
	BIRDS AND EGGS	85.00	75.00	60.00	65.00	1149	44.19	11.19	1465	Individual	56.35	20%
	Upland Game Birds	50.00	45.00			162	6.23	1.58	231	Individual	8.88	26%
	Ptarmigan	50.00	45.00			162	6.23	1.58	231	Individual	8.88	26%
	Migratory Birds	85.00	75.00			984	37.85	9.58	1210	Individual	46.54	21%
	Ducks	85.00	75.00			978	37.62	9.52	1208	Individual	46.46	21%
	Geese	20.00	10.00			5	0.19	0.05	3	Individual	0.12	66%
	Eggs	55.00	30.00			4	0.15	0.04	23	Individual	0.88	52%
	MARINE INVERTEBRATES	90.00	70.00			1321	50.81	12.86	1321	Pounds	50.81	22%
	Clams	90.00	60.00			603	23.19	5.87	77	5 Gal Bckt	2.96	32%
Butter Clams		85.00	60.00			502	19.31	4.89	64	5 Gal Bckt	2.46	37%
	Butter Clams	30.00	25.00			101	3.88	0.98	13	5 Gal Bckt	0.50	53%

Appendix Table 2. Estimated Harvest and Use of Fish, Game and Plant Resources, Karluk, 1982/1983

Resource Name	Use	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
		Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
Horse Clams (Gaper)	0.00		0.00			0	0.00	0.00	0		0.00	
Crabs	85.00		25.00			169	6.50	1.65	120	Individual	4.62	56%
Dungeness Crab	35.00		5.00			36	1.38	0.35	52	Individual	2.00	94%
King Crab	80.00		20.00			81	3.12	0.79	35	Individual	1.35	48%
Tanner Crab	30.00		10.00			52	2.00	0.51	33	Individual	1.27	66%
Cockles	0.00		0.00			0	0.00	0.00	0		0.00	
Geoducks	5.00		5.00			20	0.77	0.19	1	5 Gal Bckt	0.04	100%
Scallops	20.00		0.00			0	0.00	0.00	0		0.00	
Mussels	15.00		15.00			41	1.58	0.40	5	5 Gal Bckt	0.19	39%
Chitons (gumboots, bidarkis)	75.00		65.00			210	8.08	2.04	27	5 Gal Bckt	1.04	22%
Octopus	75.00		40.00			135	5.19	1.31	34	Individual	1.31	32%
Sea Urchin	65.00		60.00			143	5.50	1.39	57	5 Gal Bckt	2.19	42%
Shrimp	15.00		0.00			0	0.00	0.00	0		0.00	
PLANTS AND BERRIES			95.00	70.00	35.00							
Berries			95.00									
Plants/Greens/Mushrooms			75.00									
Seaweed/Kelp			0.00									

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983.

Appendix Table 3. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1982/1983

Number of Households Sampled = 32      Estimated Number of People in Community = 178.7  
 Number of Households in Community = 43

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Unit	
ALL RESOURCES	100.00		93.80	96.90	87.50	72114	1677.07	403.51	72115	Pounds	22%
FISH	96.90		78.10	96.90	81.30	43256	1005.95	242.03	11019	Individual	22%
SALMON	96.90		71.90			30112	700.28	168.49	6734	Individual	22%
Chum Salmon	34.40		25.00			1160	26.98	6.49	180	Individual	44%
Coho Salmon	84.40		62.50			7232	168.19	40.47	1059	Individual	21%
Chinook Salmon	59.40		34.40			1024	23.81	5.73	113	Individual	38%
Pink Salmon	71.90		56.30			4647	108.07	26.00	1767	Individual	30%
Sockeye Salmon	87.50		56.30			16049	373.23	89.80	3615	Individual	28%
NON-SALMON FISH	93.80		65.60			13144	305.67	73.55	4285	Individual	35%
Cod	68.80		34.40			1337	31.09	7.48	418	Individual	39%
Flounder	21.90		12.50			206	4.79	1.15	69	Individual	62%
Sole	12.50		6.30			137	3.19	0.77	137	Individual	97%
Halibut	84.40		46.90			8295	192.91	46.41	230	Individual	33%
Herring	40.60		15.60			941	21.88	5.27	1881	Individual	59%
Rockfish	28.10		18.80			227	5.28	1.27	120	Individual	50%
Red Rockfish	21.90		15.60			75	1.74	0.42	19	Individual	52%
Sea Bass	15.60		9.40			151	3.51	0.84	101	Individual	56%
Unknown Rockfish	0.00		0.00			0	0.00	0.00	0		
Sculpin	6.30		3.10			1	0.02	0.01	1	Individual	100%
Pollock	0.00		0.00			0	0.00	0.00	0		
Trout and Char	93.80		59.40			2002	46.56	11.20	1430	Individual	50%
Char	59.40		40.60			1488	34.60	8.33	1063	Individual	62%
Dolly Varden	59.40		40.60			1488	34.60	8.33	1063	Individual	62%
Trout	90.60		46.90			513	11.93	2.87	367	Individual	33%
Steelhead	90.60		46.90			513	11.93	2.87	367	Individual	33%

Appendix Table 3. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1982/1983

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Alt	Harv	Recv	Give	Total	Mean HH	Total	Unit	
GAME										
Big Game	93.80		62.50	65.60	65.60	11152	259.35	62.40	359 Individual	8.35
Brown Bear	93.80		62.50			10998	255.79	61.54	251 Individual	5.84
Caribou	25.00		3.10			202	4.70	1.13	1 Individual	0.02
Deer	6.30		0.00			0	0.00	0.00	0	0.00
Elk	93.80		62.50			10797	251.09	60.41	250 Individual	5.81
Goat	3.10		0.00			0	0.00	0.00	0	0.00
Moose	0.00		0.00			0	0.00	0.00	0	0.00
Small Game/Furbearer	0.00		0.00			0	0.00	0.00	0	0.00
Fox	18.80		15.60			153	3.56	0.86	108 Individual	2.51
Beaver	3.10		3.10			0	0.00	0.00	27 Individual	0.63
Hare	0.00		0.00			0	0.00	0.00	0	0.00
Land Otter	15.60		12.50			153	3.56	0.86	77 Individual	1.79
Weasel	0.00		0.00			0	0.00	0.00	0	0.00
	6.30		6.30			0	0.00	0.00	4 Individual	0.09
MARINE MAMMALS										
Seal	50.00		28.10			10417	242.26	58.29	93 Individual	2.16
Harbor Seal	50.00		28.10			3161	73.51	17.69	56 Individual	1.30
Sea Lion	21.90		18.80			3161	73.51	17.69	56 Individual	1.30
						7256	168.74	40.60	36 Individual	0.84
BIRDS AND EGGS										
Upland Game Birds	78.10		56.30	37.50	34.40	905	21.05	5.06	1541 Individual	35.84
Plarimigan	15.60		9.40			67	1.56	0.37	95 Individual	2.21
Migratory Birds	15.60		9.40			67	1.56	0.37	95 Individual	2.21
Ducks	71.90		50.00			762	17.72	4.26	937 Individual	21.79
Geese	71.90		50.00			756	17.58	4.23	934 Individual	21.72
Eggs	3.10		3.10			6	0.14	0.03	3 Individual	0.07
	43.80		25.00			77	1.79	0.43	509 Individual	11.84
MARINE INVERTEBRATES										
Clams	87.50		81.30			6384	148.47	35.72	6384 Pounds	148.47
Butter Clams	78.10		78.10			2977	69.23	16.66	382 5 Gal Bckt	8.88
Razor Clams	78.10		78.10			2820	65.58	15.78	361 5 Gal Bckt	8.40
	25.00		18.80			157	3.65	0.88	20 5 Gal Bckt	0.47

Appendix Table 3. Estimated Harvest and Use of Fish, Game, and Plant Resources, Larsen Bay, 1982/1983

Resource Name	Percentage of Households			Pounds Harvested		Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Total	Mean HH	Total	Unit	Mean HH	Harvest
Horse Clams (Gaper)	0.00		0.00	0	0.00	0		0.00	
Crabs	78.10		31.30	1037	24.12	701	Individual	16.30	35%
Dungeness Crab	53.10		25.00	208	4.84	297	Individual	6.97	37%
King Crab	78.10		28.10	596	13.86	259	Individual	6.02	34%
Tanner Crab	46.90		15.60	232	5.40	145	Individual	3.37	48%
Cockles	3.10		3.10	13	0.30	2	5 Gal Bckt	0.05	50%
Geoducks	3.10		0.00	0	0.00	0		0.00	
Scallops	15.60		9.40	81	1.88	81	Pounds	1.88	60%
Mussels	3.10		3.10	16	0.37	2	5 Gal Bckt	0.05	100%
Critons (gumboots bidarkis)	53.10		50.00	734	17.07	84	5 Gal Bckt	2.19	48%
Octopus	78.10		62.50	952	22.14	238	Individual	5.53	24%
Sea Urchin	53.10		53.10	482	11.21	193	5 Gal Bckt	4.49	32%
Shrimp	28.10		15.60	94	2.19	84	Pounds	2.19	45%
PLANTS AND BERRIES									
Berries			81.30						
Plants/Greens/Mushrooms			78.10						
Seaweed/Kelp			56.30						
			6.30						

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983.



Appendix Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1982/1983

Number of Households Sampled = 76.00      Estimated Number of People in Community = 356.21  
 Number of Households in Community = 94.00

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
ALL RESOURCES	100.00		100.00	81.60	77.60	174943	1861.10	491.12	174944	Pounds	1861.11	8%
FISH	98.70		96.10	69.70	73.70	107974	1148.66	303.12	20535	Individual	218.46	8%
SALMON	98.70		94.70			83291	886.07	233.83	16940	Individual	180.21	8%
Chum Salmon	90.80		86.80			24565	261.33	68.96	3814	Individual	40.57	10%
Coho Salmon	98.70		94.70			36131	384.37	101.43	5290	Individual	56.28	9%
Chinook Salmon	32.90		23.70			1010	10.74	2.84	111	Individual	1.18	36%
Pink Salmon	90.80		86.80			18466	196.45	51.84	7022	Individual	74.70	9%
Sockeye Salmon	65.80		50.00			3119	33.18	8.76	703	Individual	7.48	15%
NON-SALMON FISH	90.80		84.20			24683	262.59	69.29	3596	Individual	38.26	22%
Cod	44.70		39.50			1730	18.40	4.86	541	Individual	5.76	17%
Flounder	2.60		2.60			259	2.76	0.73	87	Individual	0.93	65%
Sole	2.60		2.60			24	0.26	0.07	25	Individual	0.27	60%
Halibut	89.50		81.60			20182	214.70	56.66	559	Individual	5.95	16%
Herring	22.40		13.20			600	6.38	1.68	1200	Individual	12.77	49%
Rockfish	13.20		10.50			769	8.18	2.16	323	Individual	3.44	39%
Red Rockfish	9.20		7.90			455	4.84	1.28	114	Individual	1.21	37%
Sea Bass	7.90		6.60			295	3.14	0.83	197	Individual	2.10	49%
Unknown Rockfish	1.30		1.30			19	0.20	0.05	12	Individual	0.13	91%
Sculpin	7.90		6.60			49	0.52	0.14	98	Individual	1.04	56%
Pollock	1.30		1.30			17	0.18	0.05	12	Individual	0.13	91%
Trout and Char	32.90		28.90			1053	11.20	2.96	752	Individual	8.00	26%
Char	32.90		28.90			872	9.28	2.45	623	Individual	6.63	28%
Dolly Varden	32.90		28.90			872	9.28	2.45	623	Individual	6.63	28%
Trout	10.50		7.90			180	1.91	0.51	129	Individual	1.37	39%
Steelhead	10.50		7.90			180	1.91	0.51	129	Individual	1.37	39%

Appendix Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1982/1983

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	Harvest
GAME	98.70		88.20	65.80	64.50	25996	276.55	72.98	912	Individual	9.70	15%
Big Game	98.70		88.20			25686	273.26	72.11	539	Individual	5.73	13%
Brown Bear	10.50		5.30			928	9.87	2.61	6	Individual	0.06	50%
Caribou	3.90		2.60			2226	23.68	6.25	15	Individual	0.16	60%
Deer	97.40		86.80			22174	235.89	62.25	513	Individual	5.46	13%
Elk	1.30		0.00			0	0.00	0.00	0		0.00	
Goat	1.30		1.30			359	3.82	1.01	5	Individual	0.05	80%
Moose	0.00		0.00			0	0.00	0.00	0		0.00	
Small Game/Furbearer	27.60		23.70			309	3.29	0.87	372	Individual	3.96	27%
Fox	7.90		9.20			0	0.00	0.00	121	Individual	1.29	40%
Beaver	2.60		3.90			0	0.00	0.00	25	Individual	0.27	56%
Hare	22.40		17.10			309	3.29	0.87	155	Individual	1.65	27%
Land Otter	9.20		10.50			0	0.00	0.00	59	Individual	0.63	33%
Weasel	1.30		1.30			0	0.00	0.00	12	Individual	0.13	91%
MARINE MAMMALS	71.10		56.60			28161	299.59	79.06	255	Individual	2.71	16%
Seal	52.60		43.40			8866	94.32	24.89	158	Individual	1.68	18%
Harbor Seal	52.60		43.40			8866	94.32	24.89	158	Individual	1.68	18%
Sea Lion	57.90		48.70			19294	205.26	54.16	96	Individual	1.02	16%
BIRDS AND EGGS	89.50		85.50	55.30	51.30	2272	24.17	6.38	3500	Individual	37.23	9%
Upland Game Birds	17.10		14.50			100	1.06	0.28	142	Individual	1.51	32%
Ptarmigan	17.10		14.50			100	1.06	0.28	142	Individual	1.51	32%
Migratory Birds	89.50		81.60			1991	21.18	5.59	2148	Individual	22.85	10%
Ducks	88.20		80.30			1583	16.84	4.44	1954	Individual	20.79	9%
Geese	19.70		19.70			408	4.34	1.15	194	Individual	2.06	27%
Eggs	63.20		59.20			181	1.93	0.51	1210	Individual	12.87	12%
MARINE INVERTEBRATES	98.70		98.70			10541	112.14	29.59	10541	Pounds	112.14	8%
Clams	89.50		88.20			3488	37.11	9.79	447	5 Gal Bckt	4.76	11%
Butter Clams	88.20		86.80			3099	32.97	8.70	397	5 Gal Bckt	4.22	12%
Razor Clams	22.40		22.40			370	3.94	1.04	47	5 Gal Bckt	0.50	23%

Appendix Table 4. Estimated Harvest and Use of Fish, Game, and Plant Resources, Old Harbor, 1982/1983

Resource Name	Percentage of Households				Give	Pounds Harvested		Amount Harvested		95% Conf. Limit (+/-)	
	Use	Att	Harv	Recv		Total	Mean HH	Percapita	Total		Units
Horse Clams (Gaper)	1.30		1.30			20	0.21	0.06	2 5 Gal Bckt	0.02	100%
Crabs	77.60		64.50			2781	29.59	7.81	1615 Individual	17.18	15%
Dungeness Crab	40.80		32.90			321	3.41	0.90	459 Individual	4.88	22%
King Crab	73.70		61.80			2000	21.28	5.61	870 Individual	9.26	14%
Tanner Crab	32.90		22.40			459	4.88	1.29	287 Individual	3.05	27%
Cockles	67.10		65.80			1833	19.50	5.15	235 5 Gal Bckt	2.50	11%
Geoducks	1.30		1.30			93	0.99	0.26	6 5 Gal Bckt	0.06	83%
Scallops	5.30		3.90			30	0.32	0.08	30 Pounds	0.32	56%
Mussels	5.30		6.60			70	0.74	0.20	9 5 Gal Bckt	0.10	33%
Chitons (gumboots, bidarkis)	60.50		60.50			1230	13.09	3.45	158 5 Gal Bckt	1.68	11%
Octopus	40.80		34.20			361	3.84	1.01	90 Individual	0.96	18%
Sea Urchin	61.80		60.50			421	4.48	1.18	168 5 Gal Bckt	1.79	13%
Shrimp	23.70		11.80			236	2.51	0.66	236 Pounds	2.51	32%
PLANTS AND BERRIES											
Berries			84.20	25.00	9.20						
Plants/Greens/Mushrooms			77.60								
Seaweed/Kelp			65.80								
			2.60								

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983.

Appendix Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzinkie, 1982/1983

Number of Households Sampled = 32.00      Estimated Number of People in Community = 234.06  
 Number of Households in Community = 70.00

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total Units	Mean HH
ALL RESOURCES	100.00		96.90	90.60	84.40	86395	1234.21	369.11	86394 Pounds	1234.20
FISH	96.90		84.40	90.60	84.40	54944	784.91	234.74	13108 Individual	187.26
SALMON	96.90		81.30			40420	577.43	172.69	7886 Individual	112.66
Chum Salmon	78.10		59.40			7298	104.26	31.18	1133 Individual	16.19
Coho Salmon	93.80		75.00			15030	214.71	64.21	2201 Individual	31.44
Chinook Salmon	25.00		18.80			595	8.50	2.54	66 Individual	0.94
Pink Salmon	75.00		62.50			3521	50.30	15.04	1339 Individual	19.13
Sockeye Salmon	93.80		71.90			13976	199.66	59.71	3148 Individual	44.97
NON-SALMON FISH	93.80		84.40			14524	207.49	62.05	5222 Individual	74.60
Cod	75.00		53.10			1547	22.10	6.61	483 Individual	6.90
Flounder	21.90		18.80			321	4.59	1.37	107 Individual	1.53
Sole	3.10		3.10			11	0.16	0.05	11 Individual	0.16
Halibut	90.60		59.40			7897	112.81	33.74	219 Individual	3.13
Herring	43.80		21.90			755	10.79	3.23	1509 Individual	21.56
Rockfish	50.00		43.80			972	13.89	4.15	630 Individual	9.00
Red Rockfish	3.10		3.10			44	0.63	0.19	11 Individual	0.16
Sea Bass	46.90		40.60			663	9.47	2.83	442 Individual	6.31
Unknown Rockfish	15.60		15.60			266	3.80	1.14	177 Individual	2.53
Sculpin	21.90		18.80			81	1.16	0.35	162 Individual	2.31
Pollock	3.10		3.10			13	0.19	0.06	9 Individual	0.13
Trout and Char	78.10		65.60			2928	41.83	12.51	2091 Individual	29.87
Char	75.00		62.50			2490	35.57	10.64	1778 Individual	25.40
Dolly Varden	75.00		62.50			2490	35.57	10.64	1778 Individual	25.40
Trout	50.00		31.30			438	6.26	1.87	313 Individual	4.47
Steelhead	50.00		31.30			438	6.26	1.87	313 Individual	4.47

Appendix Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Oluzinkie, 1982/1983

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Per capita	Total	Units	Mean HH	Harvest
GAME												
Big Game	90.60		62.50	84.40	50.00	9211	131.59	39.35	470	Individual	6.71	33%
Brown Bear	90.60		59.40			8733	124.76	37.31	186	Individual	2.66	32%
Caribou	0.00		0.00			0	0.00	0.00	0		0.00	
Deer	3.10		3.10			984	14.06	4.20	7	Individual	0.10	128%
Elk	90.60		59.40			7749	110.70	33.11	179	Individual	2.56	30%
Goat	9.40		0.00			0	0.00	0.00	0		0.00	
Moose	0.00		0.00			0	0.00	0.00	0		0.00	
Small Game/Furbearer	0.00		0.00			0	0.00	0.00	0		0.00	
Fox	50.00		40.60			477	6.81	2.04	284	Individual	4.06	39%
Beaver	6.30		6.30			0	0.00	0.00	20	Individual	0.29	100%
Hare	3.10		3.10			0	0.00	0.00	11	Individual	0.16	145%
Land Otter	50.00		40.60			477	6.81	2.04	238	Individual	3.40	38%
Weasel	3.10		3.10			0	0.00	0.00	15	Individual	0.21	146%
	0.00		0.00			0	0.00	0.00	0		0.00	
MARINE MAMMALS												
Seal	53.10		31.30			7578	108.26	32.38	107	Individual	1.53	58%
Harbor Seal	50.00		31.30			5390	77.00	23.03	96	Individual	1.37	56%
Sea Lion	50.00		31.30			5390	77.00	23.03	96	Individual	1.37	56%
	12.50		9.40			2188	31.26	9.35	11	Individual	0.16	90%
BIRDS AND EGGS												
Upland Game Birds	90.60		71.90	84.40	59.40	2829	40.41	12.09	4465	Individual	63.79	32%
Ptarmigan	3.10		0.00			0	0.00	0.00	0		0.00	
Migratory Birds	3.10		0.00			0	0.00	0.00	0		0.00	
Ducks	90.60		68.80			2583	36.90	11.04	2826	Individual	40.37	38%
Geese	87.50		68.80			2105	30.07	8.99	2599	Individual	37.13	37%
Eggs	12.50		6.30			478	6.83	2.04	228	Individual	3.26	138%
	65.60		50.00			246	3.51	1.05	1638	Individual	23.40	36%
MARINE INVERTEBRATES												
Clams	100.00		93.80			11834	169.06	50.56	11834	Pounds	169.06	45%
Butter Clams	87.50		75.00			2398	34.26	10.25	307	5 Gal Bckt	4.39	34%
Razor Clams	87.50		75.00			2321	33.16	9.92	298	5 Gal Bckt	4.26	35%
	9.40		6.30			43	0.61	0.18	5	5 Gal Bckt	0.07	100%

Appendix Table 5. Estimated Harvest and Use of Fish, Game, and Plant Resources, Ouzinkie, 1982/1983

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested		95% Conf. Limit (+/-) Harvest	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units		Mean HH
Horse Clams (Gaper)	3.10		3.10			34	0.49	0.15	4	5 Gal Bckt	0.06	150%
Crabs	93.80		53.10			4896	69.94	20.92	2542	Individual	36.31	83%
Dungeness Crab	65.60		34.40			346	4.94	1.48	494	Individual	7.06	56%
King Crab	90.60		50.00			4186	59.80	17.88	1820	Individual	26.00	103%
Tanner Crab	68.80		31.30			364	5.20	1.56	228	Individual	3.26	45%
Cockles	43.80		34.40			469	6.70	2.00	60	5 Gal Bckt	0.86	56%
Geoducks	9.40		9.40			951	13.59	4.06	63	5 Gal Bckt	0.90	101%
Scallops	9.40		6.30			41	0.59	0.18	42	Pounds	0.60	116%
Mussels	18.80		18.80			137	1.96	0.59	18	5 Gal Bckt	0.26	38%
Chitons (gumboots,bidarkis)	71.90		68.80			2346	33.51	10.02	301	5 Gal Bckt	4.30	103%
Octopus	59.40		37.50			473	6.76	2.02	118	Individual	1.69	45%
Sea Urchin	15.60		12.50			36	0.51	0.15	14	5 Gal Bckt	0.20	42%
Shrimp	21.90		9.40			88	1.26	0.38	88	Pounds	1.26	85%
PLANTS AND BERRIES			93.80	75.00	45.00							
Berries			90.60									
Plants/Greens/Mushrooms			87.50									
Seaweed/Kelp			21.90									

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983

Appendix Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1982/1983

Number of Households Sampled = 55.00      Estimated Number of People in Community = 289.65  
 Number of Households in Community = 89.00

Resource Name	Percentage of Households				Pounds Harvested			Amount Harvested		95% Conf. Limit (%)	
	Use	Att	Harv	Recv	Give	Total	Mean HH	Total	Units	Mean HH	Harvest
ALL RESOURCES	100.00		94.50	83.60	76.40	81044	910.61	81044 Pounds		910.61	15%
FISH	100.00		89.10	80.00	74.50	57071	641.25	7906 Individual		88.83	16%
SALMON	100.00		81.80			28490	320.11	5429 Individual		61.00	17%
Chum Salmon	21.80		14.50			917	10.30	142 Individual		1.60	56%
Coho Salmon	89.10		72.70			15197	170.75	2225 Individual		25.00	19%
Chinook Salmon	34.50		14.50			352	3.96	39 Individual		0.44	46%
Pink Salmon	61.80		50.90			2030	22.81	772 Individual		8.67	28%
Sockeye Salmon	98.20		60.00			9994	112.29	2251 Individual		25.29	25%
NON-SALMON FISH	98.20		76.40			28581	321.13	2477 Individual		27.83	24%
Cod	67.30		49.10			2040	22.92	638 Individual		7.17	40%
Flounder	5.50		7.30			126	1.42	42 Individual		0.47	64%
Sole	1.80		1.80			13	0.15	13 Individual		0.15	123%
Halibut	96.40		67.30			24827	278.96	688 Individual		7.73	27%
Herring	5.50		1.80			5	0.06	11 Individual		0.12	127%
Rockfish	18.20		16.40			591	6.64	372 Individual		4.18	59%
Red Rockfish	1.80		1.80			52	0.58	13 Individual		0.15	123%
Sea Bass	14.50		14.50			531	5.97	354 Individual		3.98	61%
Unknown Rockfish	3.60		1.80			7	0.08	5 Individual		0.06	120%
Sculpin	5.50		7.30			12	0.13	23 Individual		0.26	69%
Pollock	0.00		0.00			0	0.00	0		0.00	
Trout and Char	32.70		34.50			967	10.87	691 Individual		7.76	36%
Char	27.30		34.50			926	10.40	662 Individual		7.44	37%
Dolly Varden	27.30		34.50			926	10.40	662 Individual		7.44	37%
Trout	9.10		3.60			41	0.46	29 Individual		0.33	86%
Steelhead	9.10		3.60			41	0.46	29 Individual		0.33	86%

Appendix Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1982/1983

Resource Name	Percentage of Households					Pounds Harvested			Amount Harvested			95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH	Percapita	Total	Units	Mean HH	
GAME												
Big Game	78.20		67.30	47.30	47.30	10506	118.04	36.27	557 Individual		6.26	36%
Brown Bear	76.40		63.60			10067	113.11	34.76	233 Individual		2.62	20%
Caribou	0.00		0.00			0	0.00	0.00	0		0.00	
Deer	14.50		0.00			0	0.00	0.00	0		0.00	
Elk	76.40		63.60			10067	113.11	34.76	233 Individual		2.62	20%
Goat	14.50		0.00			0	0.00	0.00	0		0.00	
Moose	0.00		0.00			0	0.00	0.00	0		0.00	
Small Game/Furbearer	30.90		25.50			441	4.96	1.52	324 Individual		3.64	51%
Fox	0.00		3.60			0	0.00	0.00	104 Individual		1.17	113%
Beaver	0.00		0.00			0	0.00	0.00	0		0.00	
Hare	30.90		25.50			441	4.96	1.52	220 Individual		2.47	45%
Land Otter	0.00		0.00			0	0.00	0.00	0		0.00	
Weasel	1.80		0.00			0	0.00	0.00	0		0.00	
MARINE MAMMALS												
Seal	9.10		9.10			2343	26.33	8.09	21 Individual		0.24	61%
Harbor Seal	9.10		7.30			725	8.15	2.50	13 Individual		0.15	69%
Sea Lion	9.10		7.30			725	8.15	2.50	13 Individual		0.15	69%
	0.00		1.80			1618	18.18	5.59	8 Individual		0.09	125%
BIRDS AND EGGS												
Upland Game Birds	76.40		61.80	49.10	34.50	765	8.60	2.64	1055 Individual		11.85	32%
Ptarmigan	3.60		3.60			17	0.19	0.06	24 Individual		0.27	91%
Migratory Birds	3.60		3.60			17	0.19	0.06	24 Individual		0.27	91%
Ducks	76.40		60.00			728	8.18	2.51	893 Individual		10.03	34%
Geese	76.40		58.20			721	8.10	2.49	890 Individual		10.00	34%
Eggs	0.00		1.80			7	0.08	0.02	3 Individual		0.03	133%
	20.00		12.70			20	0.22	0.07	138 Individual		1.55	47%
MARINE INVERTEBRATES												
Clams	100.00		92.70			10358	116.38	35.76	10358 Pounds		116.38	17%
Butter Clams	92.70		87.30			2840	31.91	9.80	364 5 Gal Bckt		4.09	14%
Razor Clams	92.70		87.30			2575	28.93	8.89	330 5 Gal Bckt		3.71	13%
	20.00		12.70			190	2.13	0.66	24 5 Gal Bckt		0.27	54%



Appendix Table 6. Estimated Harvest and Use of Fish, Game, and Plant Resources, Port Lions, 1982/1983

Resource Name	Percentage of Households					Pounds Harvested		H	95% Conf. Limit (+/-) Harvest
	Use	Att	Harv	Recv	Give	Total	Mean HH		
Horse Clams (Gaper)	1.80		1.80			76	0.85	11	120%
Crabs	100.00		63.60			5645	63.43	37	26%
Dungeness Crab	54.50		38.20			681	7.65	93	43%
King Crab	98.20		56.40			4079	45.83	93	30%
Tanner Crab	54.50		32.70			886	9.96	21	41%
Cockles	20.00		18.20			296	3.33	43	47%
Geoducks	5.50		7.30			267	3.00	20	72%
Scallops	18.20		1.80			4	0.04	06	120%
Mussels	9.10		9.10			94	1.06	13	58%
Chitons (gumboots, bidarkis)	38.20		30.90			455	5.11	65	36%
Octopus	43.60		30.90			239	2.69	67	31%
Sea Urchin	3.60		3.60			111	1.25	51	108%
Shrimp	43.60		20.00			405	4.55	55	53%
PLANTS AND BERRIES									
Berries			85.50	34.50	25.50				
Plants/Greens/Mushrooms			80.00						
Seaweed/Kelp			56.40						
			1.80						

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 1983.

# APPENDIX C. 1982/83 AND 1988 KODIAK ISLAND HARVEST SURVEY CONVERSION FACTORS

Resource	1983 units	1983 Conversion factor	1986 Units	1986 Conversion Factor	
Sea Lion	Individual	200.	Pounds/Individual	170.1	(Survey Specific)
Harbor Seal	Individual	45.	Pounds/Individual	63.7	(Survey Specific)
Black Fin Whale			Pounds/Individual	na	
Ducks	Individual	2.5	Individual	2.5	
Eggs	Individual	0.05	Individual	0.05	
Geese	Individual	5.	Individual	5.0	
Ptarmigan	Individual	0.7	Individual	0.7	
Clams, Razor	5 gal bkt	7.8**	6 gal bkt	9.4	
Clams, Butter	5 gal bkt	7.8**	6 gal bkt	9.4	
Clams, Horse	5 gal bkt	7.8**	6 gal bkt	9.4	
Oungeness	Individual	0.7	Individual	0.7	
King Crab	Individual	2.3	Individual	2.3	
Tanner Crab	Individual	1.6	Individual	1.6	
Cockles	5 gal bkt	7.8**	6 gal bkt	9.4	
Geoducks	5 gal bkt	7.8**	Individual	0.5	(Port Graham 1961)
Gumboots (chitons)	5 gal bkt	7.8**	6 gal bkt	9.4	
Mussels	5 gal bkt	7.8**	6 gal bkt	9.4	
octopus	Individual	4.	Individual	4.0	
Scallops	Pounds	1.	Pounds	na	
Sea Urchin	5 gal bkt	7.8**	6 gal bkt	9.4	
Abalone			6 gal bkt	6.0	(Klawock 1964)
Periwinkles/Snails			Quarts	0.4	
Sea cucumbers			Quarts	1.0	
Chinamen's Caps			Quarts	0.4	
Shrimp	Pounds	1.	Pounds	na	
Berries			Quarts	1.0	
Kelp			Pounds	na	
Other Plants			Quarts	1.0	

\*\* Invertebrate conversion factor reported as 5.0 in the 1983 report; 7.6 was actually in used in processing the survey information.